

mensions Math **textbook 1B**

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Preface

The Dimensions Math® Pre-Kindergarten to Grade 5 series is based on the pedagogy and methodology of math education in Singapore. The curriculum develops concepts in increasing levels of abstraction, emphasizing the three pedagogical stages: Concrete, Pictorial, and Abstract. Each topic is introduced, then thoughtfully developed through the use of problem solving, student discourse, and opportunities for mastery of skills.

Features and Lesson Components

Students work through the lessons with the help of five friends: Emma, Alex, Sofia, Dion, and Mei. The characters appear throughout the series and help students develop metacognitive reasoning through questions, hints, and ideas.

The colored boxes  and blank lines in the textbook lessons are used to facilitate student discussion. Rather than writing in the textbooks, students can use whiteboards or notebooks to record their ideas, methods, and solutions.

Chapter Opener

Each chapter begins with an engaging scenario that stimulates student curiosity in new concepts. This scenario also provides teachers an opportunity to review skills.

Think

Students, with guidance from teachers, solve a problem using a variety of methods.

Learn

One or more solutions to the problem in **Think** are presented, along with definitions and other information to consolidate the concepts introduced in **Think**.

Do

A variety of practice problems allow teachers to lead discussion or encourage independent mastery. These activities solidify and deepen student understanding of the concepts.

Exercise

A pencil icon  at the end of the lesson links to additional practice problems in the workbook.

Practice

Periodic practice provides teachers with opportunities for consolidation, remediation, and assessment.

Review

Cumulative reviews provide ongoing practice of concepts and skills.

Emma



Alex



Sofia



Dion



Mei



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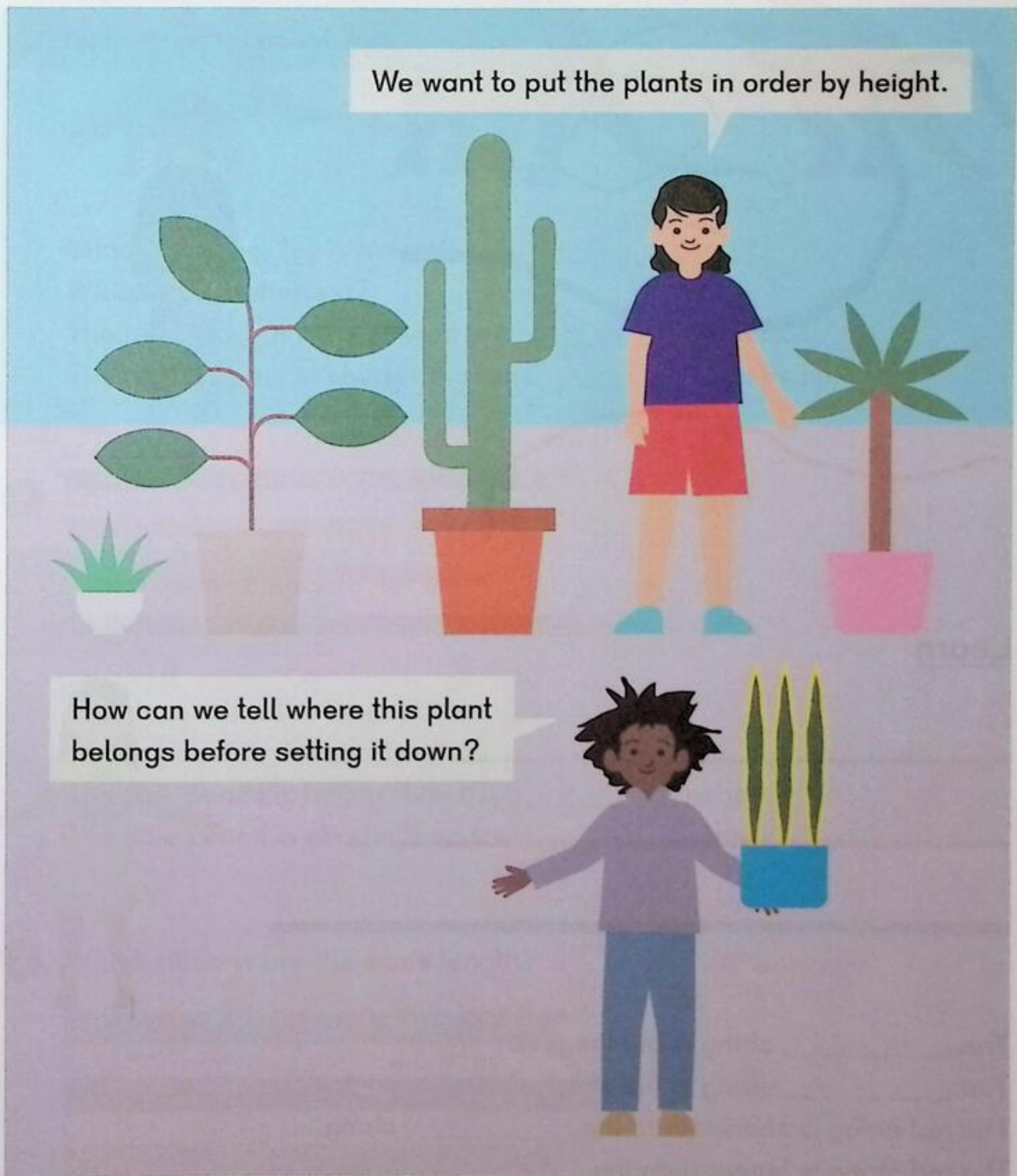
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Chapter 10

Length

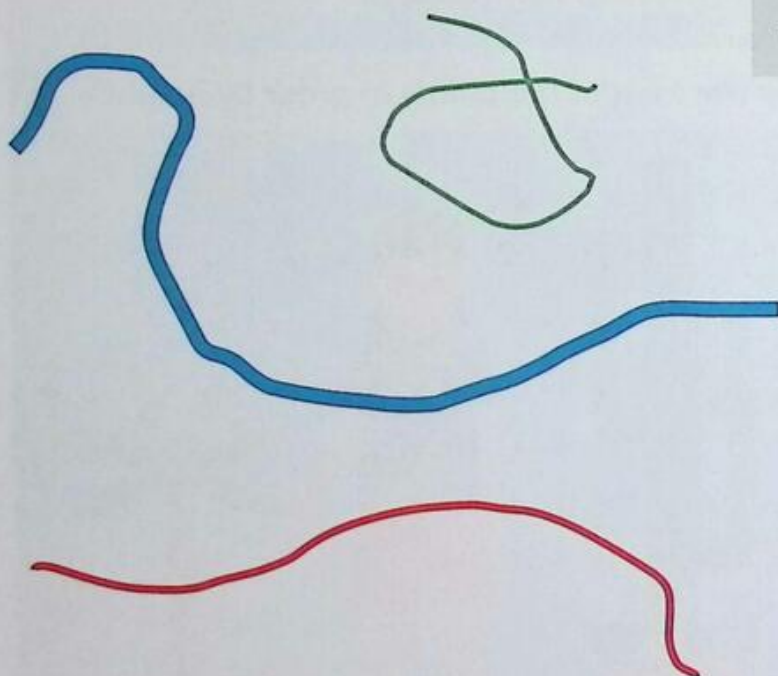


Lesson 1

Comparing Lengths Directly

1

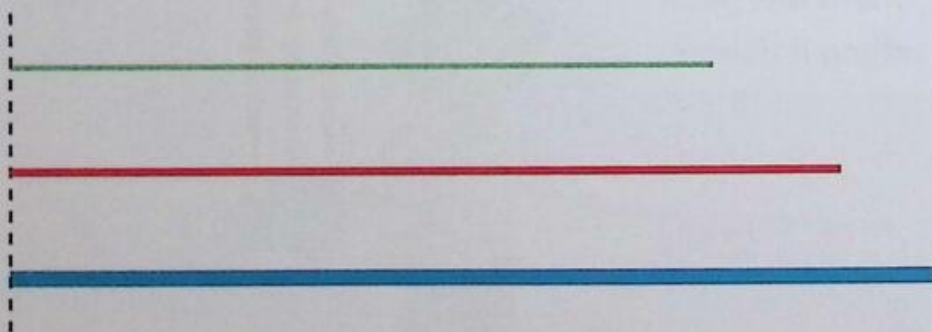
Think



Which string is the longest?
Which one is the shortest?



Learn



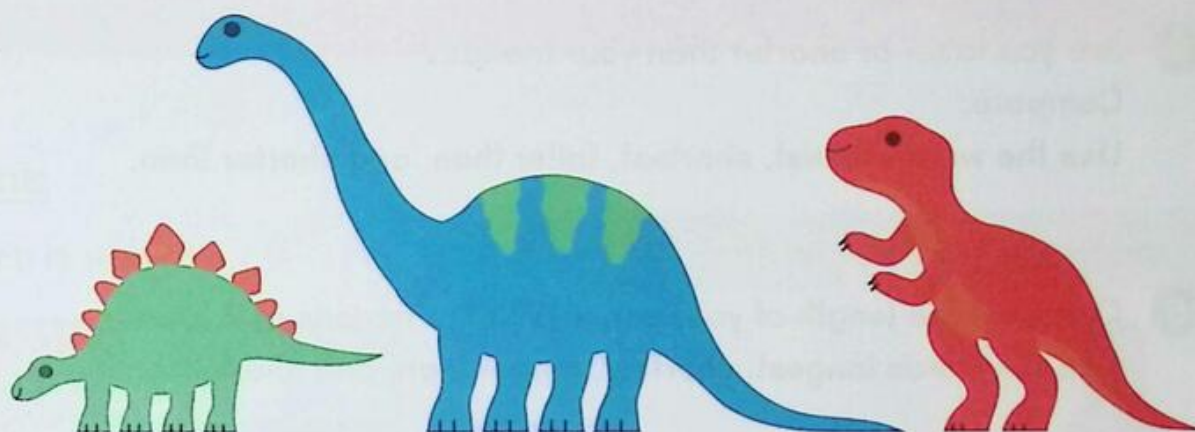
Line them up from
the same starting line.



The _____ string is the **longest**.
The _____ string is the **shortest**.
The red string is **shorter** than the _____ string.
The red string is **longer** than the _____ string.

Do

1



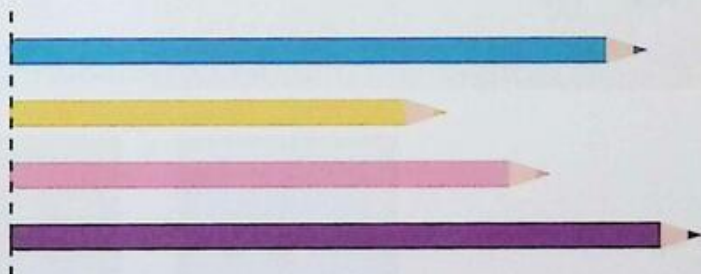
Which dinosaur toy is **tallest**?

Which one is **shortest**?

The red dinosaur is **taller than** the _____ dinosaur.

The red dinosaur is **shorter than** the _____ dinosaur.

2



Which pencil is the **longest**?

Which pencil is the **shortest**?

The pink pencil is **longer than** the _____ pencil.

The blue pencil is **shorter than** the _____ pencil.

3

Which ribbons are the **same length**?



- 4 Are you taller or shorter than your friends?
Compare.
Use the words **tallest**, **shortest**, **taller than**, and **shorter than**.

- 5 Compare the **length** of your pencil with the pencils of 2 friends.
Use the words **longest**, **shortest**, **longer than**, and **shorter than**.



- 6 Find someone whose arm span is about the **same** length as yours.



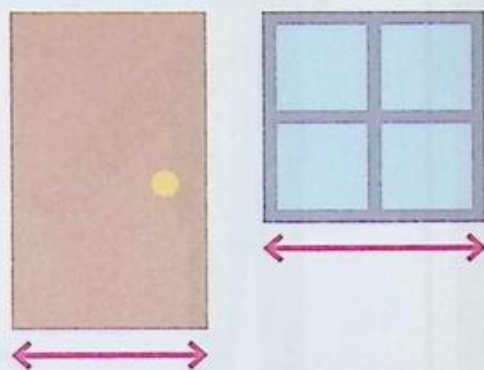
Lesson 2

Comparing Lengths Indirectly

2

Think

Which is wider?

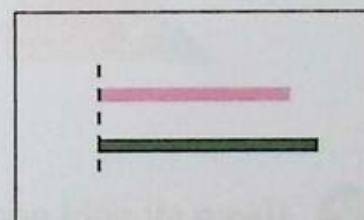
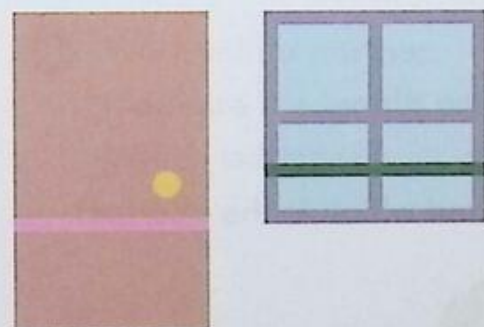


We can't move them to compare.



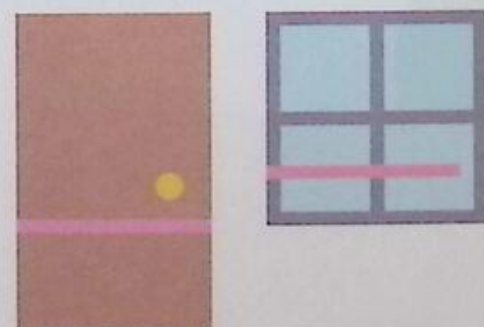
Learn

Use 2 ribbons to compare the lengths.



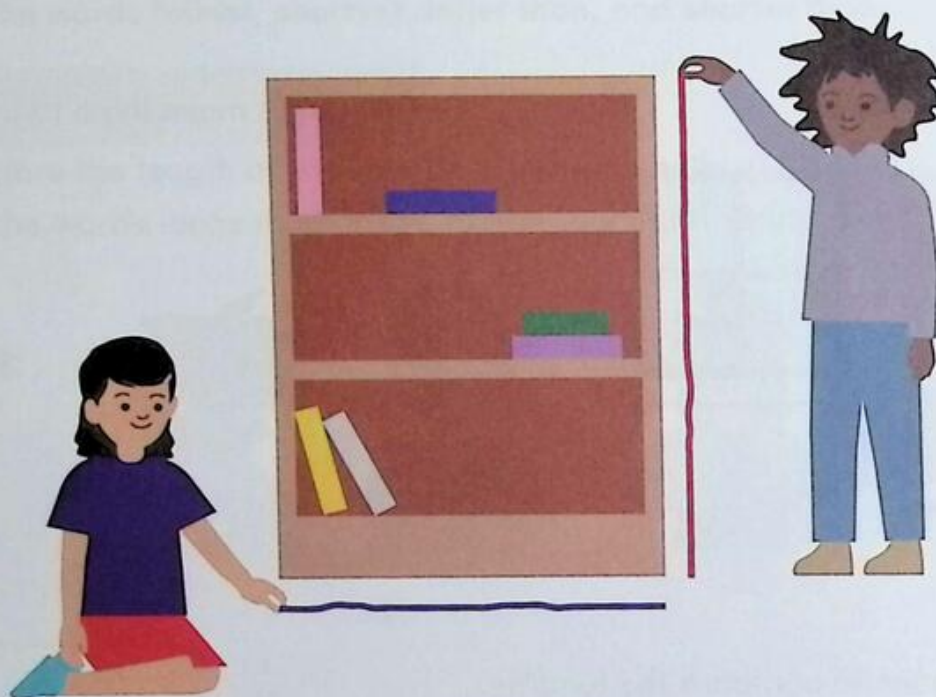
The pink ribbon is shorter than the window.

Use 1 ribbon to compare the lengths.



Do

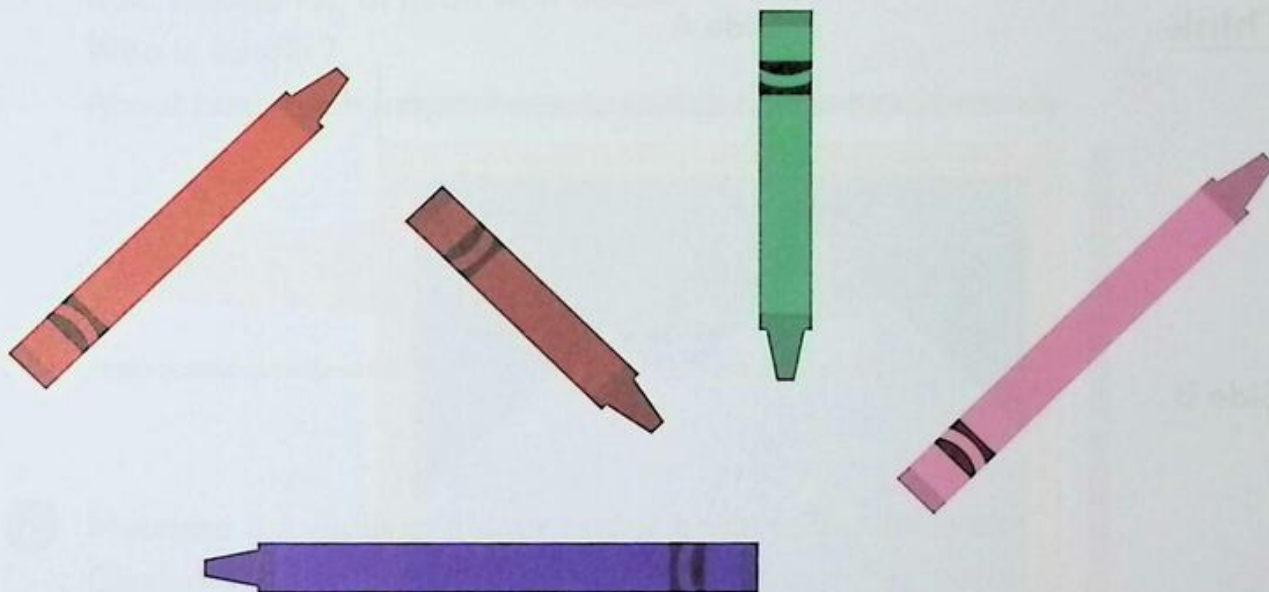
- 1 Use string to compare different lengths.



- 2 Use a straight edge.
Draw 3 lines on a paper.
Ask a friend to tell you which is the longest and which is the shortest.



- 3 Which crayon is the longest?
Which crayon is the shortest?



- 4 Work with a partner.
Measure the length around your heads.
Which is longer?

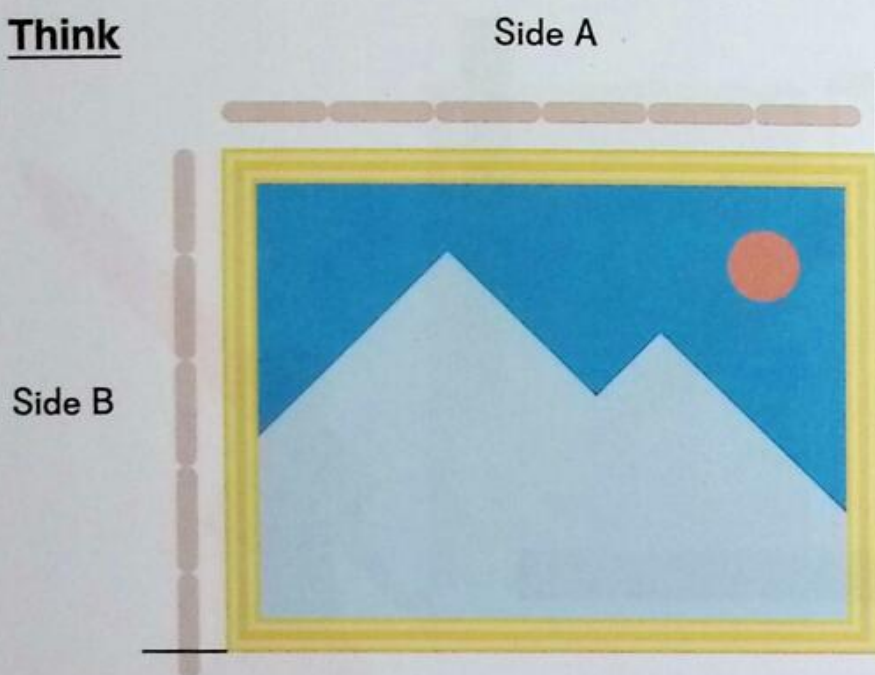


Lesson 3

Comparing Lengths with Units

3

Think



Which side is longer?
How much longer?

Learn

How many  is the difference between the lengths.



Side A is about   long.

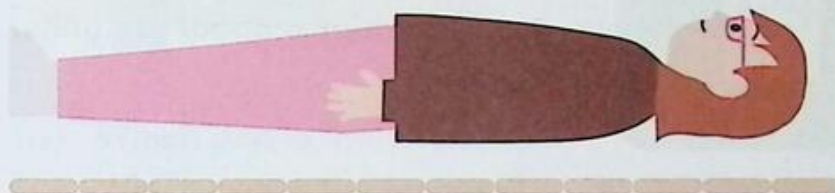
Side B is about   long.

Side _____ is about   longer than Side _____.



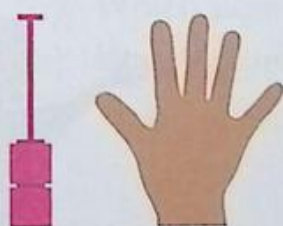
Do

- 1 Work with a partner to measure your lengths from heel to top of head with .
Who is longer?
About how much longer?



- 2 Measure the width of a door and of a window with .
Compare the lengths.

- 3 Use  to measure the length of your hand and your foot.



My hand is about   long.



My foot is about   long.

Which is longer, your hand or your foot?

- 4 Use  to measure the length and width of a notebook.



The length is about  units.

The width is about  units.

What is the difference in the number of units for the length and width?

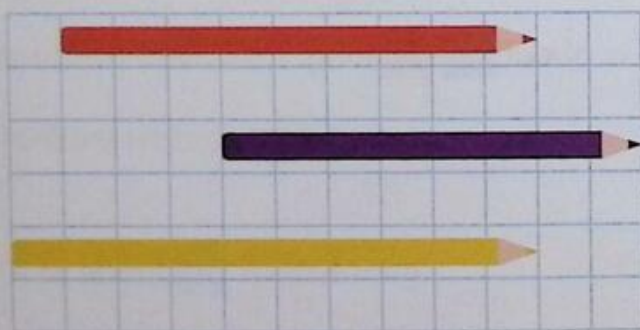
- 5 Use  to measure the length and width of the same notebook.

The length is about  units.

The width is about  units.

Why are the numbers different from when we used  than when we used  ?

- 6 Compare the lengths of the pencils.



- (a) Which pencil is the longest?
(b) Which pencil is the shortest?

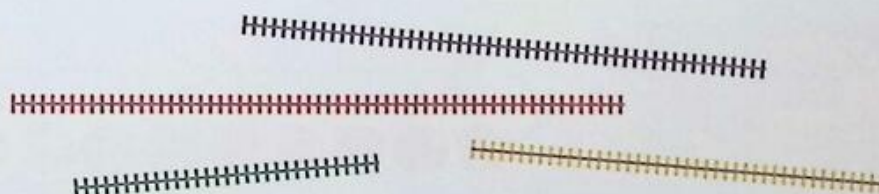


1



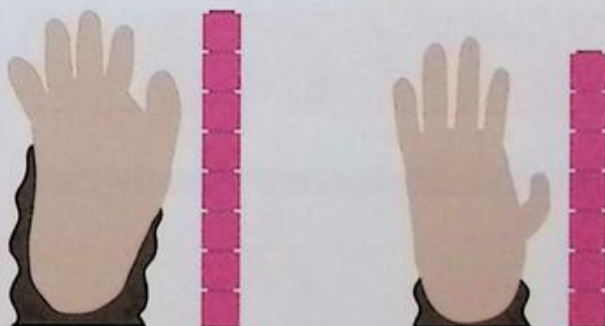
- Which pen is the shortest?
- Which pen is the longest?
- The green pen is longer than the _____ pen but shorter than the _____ pen.

2



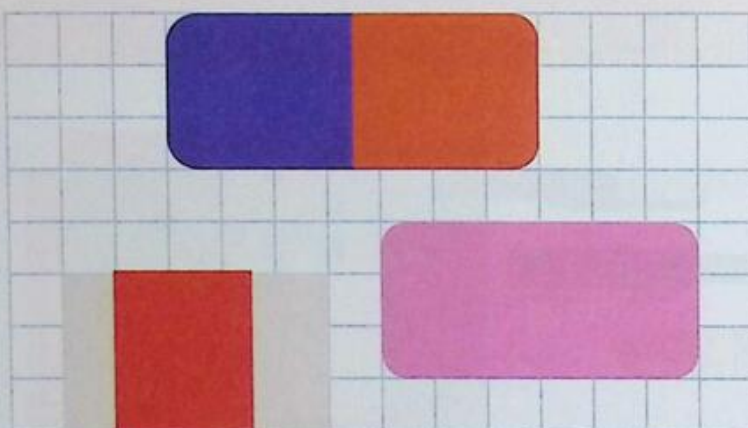
- Which pipe cleaner is the longest?
- Which pipe cleaner is the shortest?
- The _____ pipe cleaner is shorter than the yellow pipe cleaner.

3



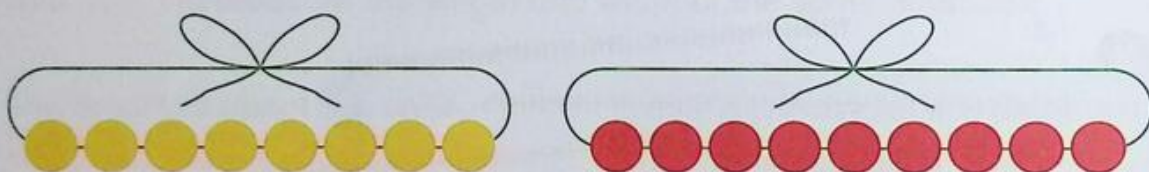
- The chimp's hand is about long.
- The chimp's foot is about long.

4



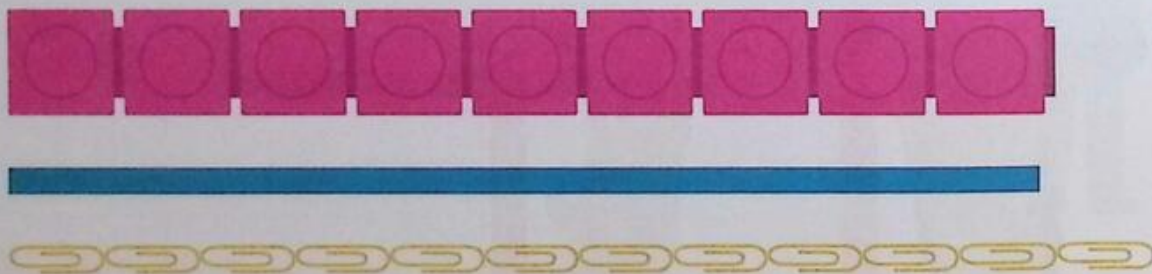
- (a) Which eraser is the longest?
- (b) Which eraser is the shortest?
- (c) The _____ eraser is shorter than the pink eraser.

5



- (a) Which necklace is the longest?
- (b) Which necklace is the shortest?
- (c) The _____ necklace is bead longer than the _____ necklace.

6



- (a) The blue yarn is about  long.
- (b) The blue yarn is about  long.

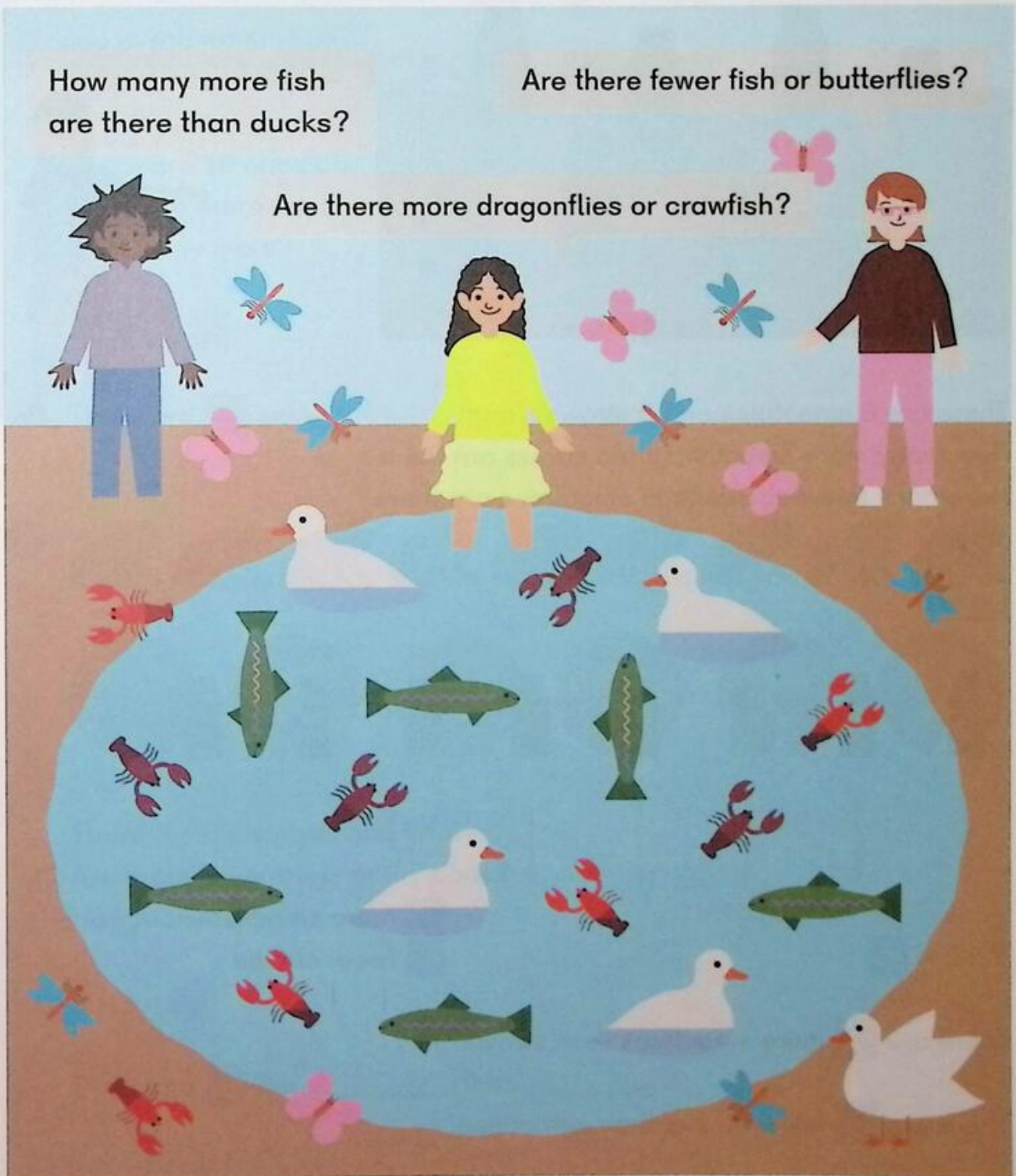
Chapter 11

Comparing

How many more fish
are there than ducks?

Are there fewer fish or butterflies?

Are there more dragonflies or crawfish?

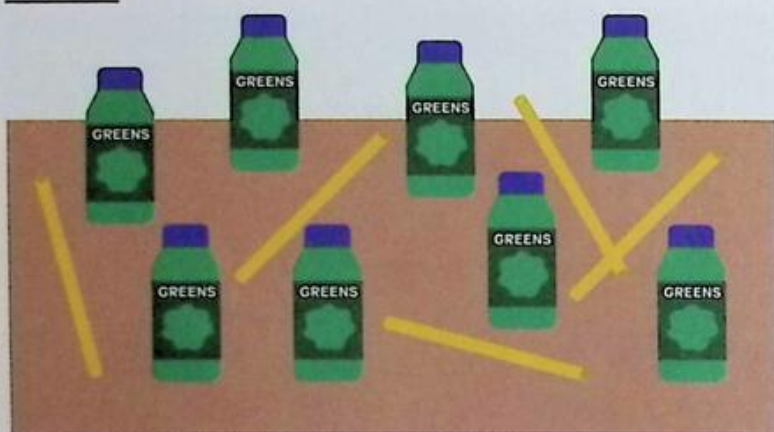


Lesson 1

Subtraction as Comparison

1

Think



How can I compare how many there are of each?

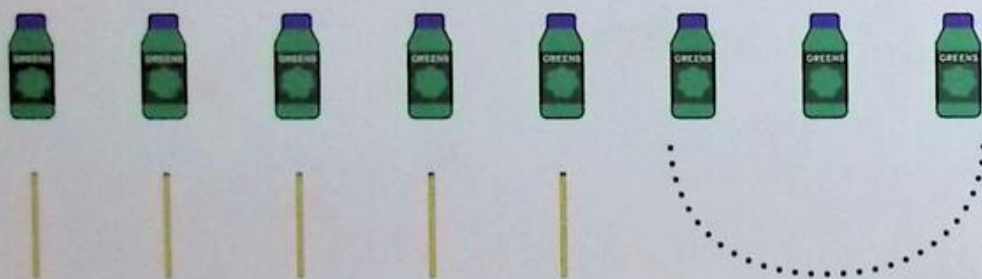


There are 8 smoothies and 5 straws.

How many more smoothies than straws are there?

How many fewer straws than smoothies are there?

Learn



$$8 - 5 = \square$$

☐ more smoothies
☐ fewer straws

There are ☐ more smoothies than straws.

There are ☐ fewer straws than smoothies.

Do

1



There are 10 cups and 6 coasters.

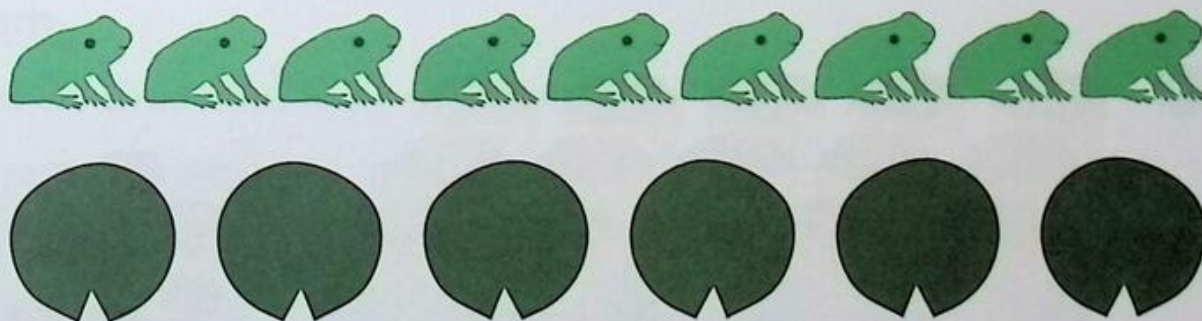
Are there more cups or coasters?

How many more?

$$10 - 6 = \square$$

There are $\square$ more _____ than _____.

2



There are 6 lily pads and 9 frogs.

Are there fewer frogs or lily pads?

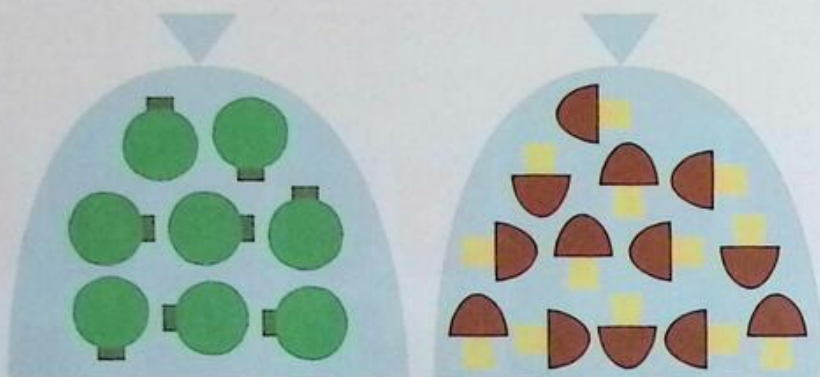
How many fewer?

$$9 - 6 = \square$$

There are $\square$ fewer _____ than _____.

Do

3



Mei buys 8 brussels sprouts and 13 mushrooms.

Did she buy fewer mushrooms or brussels sprouts?

How many fewer?

$$\square \bigcirc \square = \square$$

She buys $\square$ fewer _____ than _____.

4



Dion has 15 cupcakes and 7 cherries.

He wants to put 1 cherry on each cupcake.

How many more cherries does he need?

$$\square \bigcirc \square = \square$$

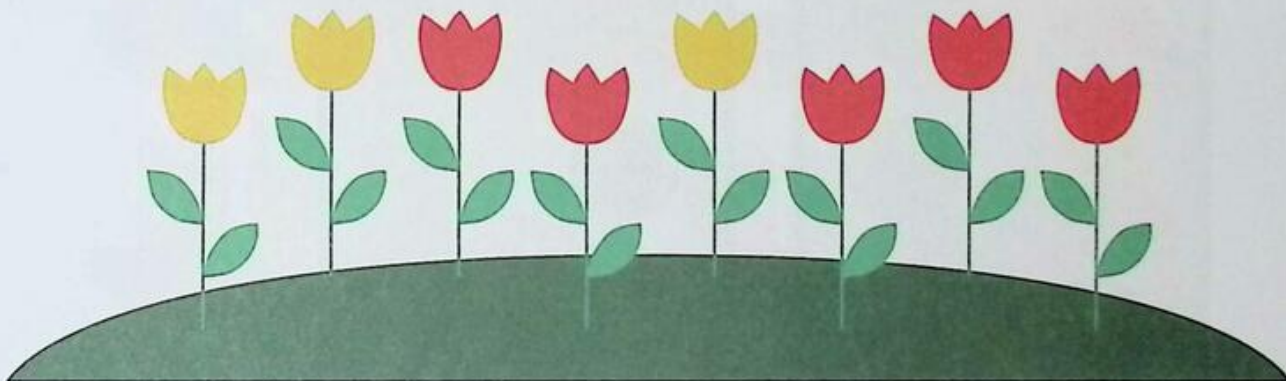
He needs $\square$ more cherries.

Lesson 2

Making Comparison Subtraction Stories

2

Think



Make up a comparison subtraction story for $5 - 3$ about the tulips.

Learn

There are 5 red tulips and 3 yellow tulips.

How many more red tulips are there than yellow tulips?

$$5 - 3 = \square$$

There are $\square$ more red tulips than yellow tulips.

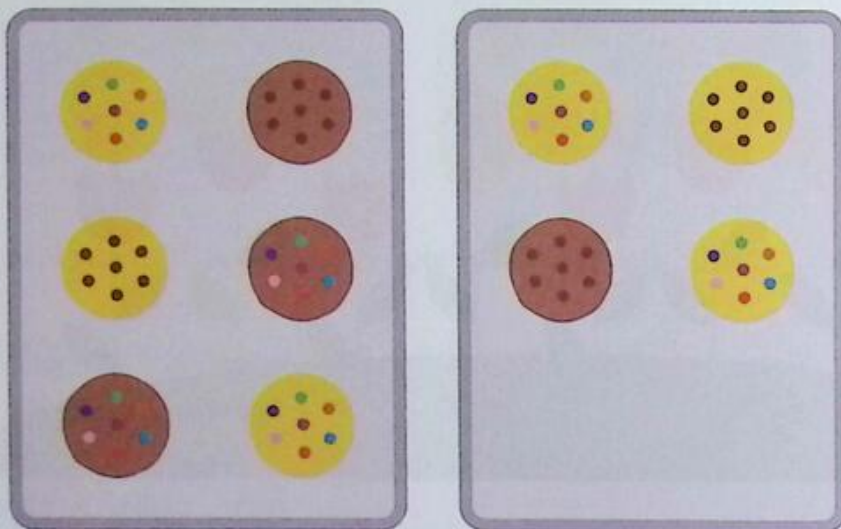
How many fewer yellow tulips are there than red tulips?

$$5 - 3 = \square$$

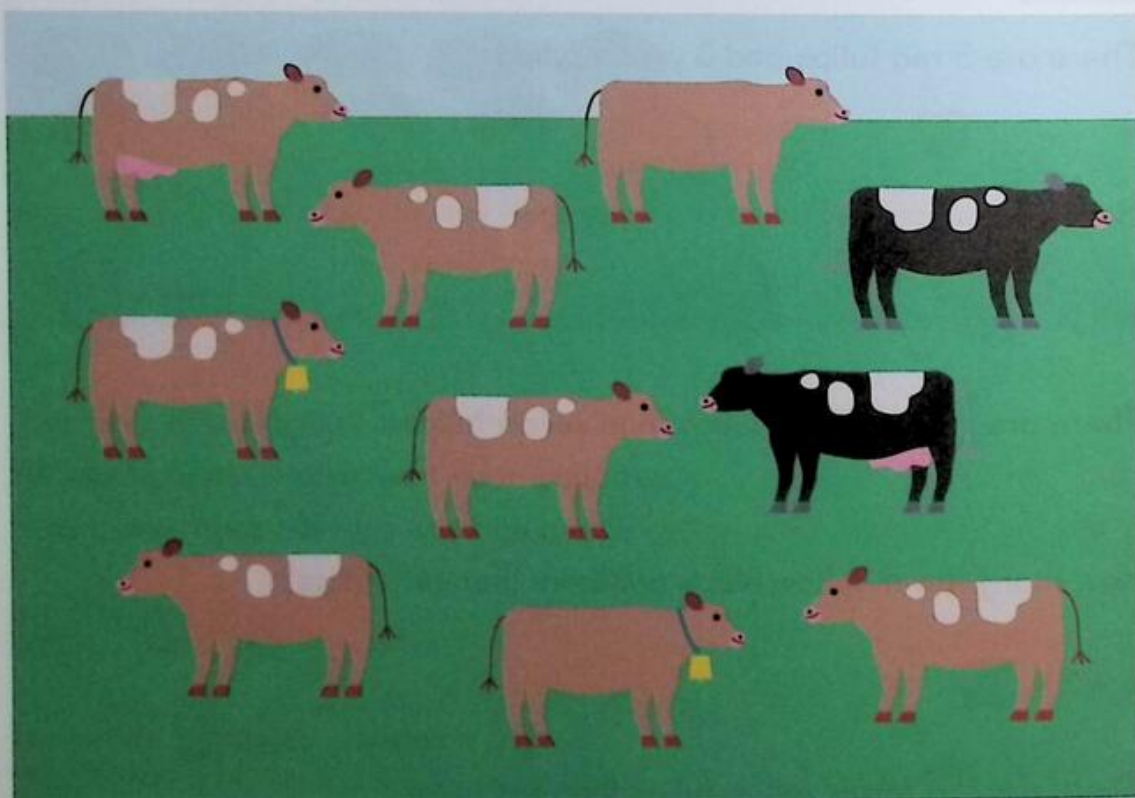
There are $\square$ fewer yellow tulips than red tulips.

Do

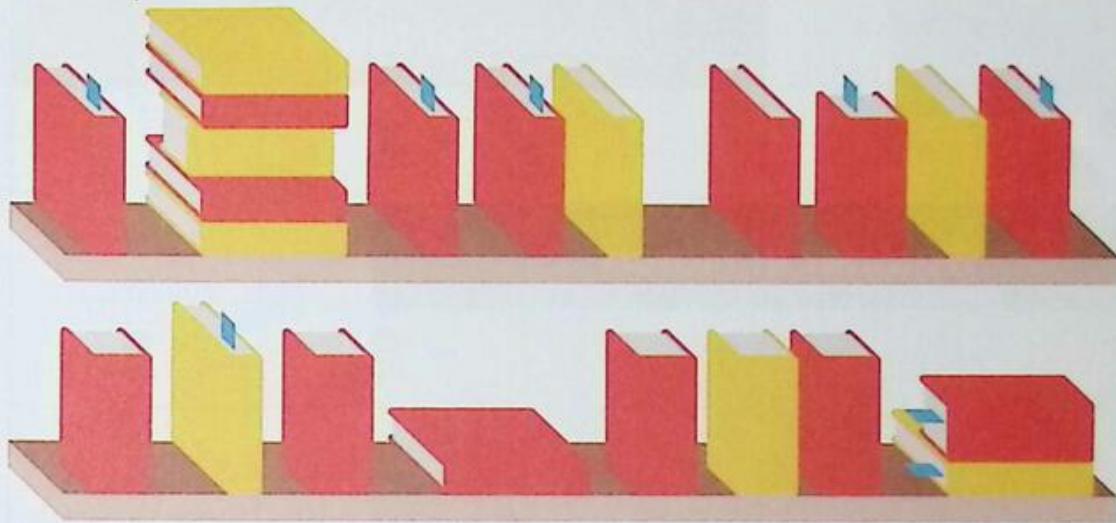
- 1 Make up a subtraction story for $6 - 4$ about the cookies.



- 2 Make up a subtraction story for $8 - 2$ about the cows.

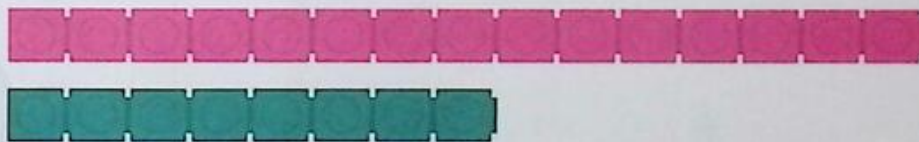


- ③ Make up subtraction stories for $14 - 8$ about the books.

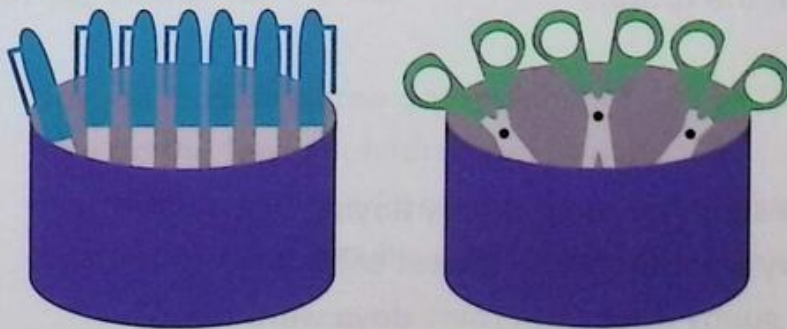


- ④ Make up your own comparison subtraction stories.

- (a) I have 15 pink cubes and 8 green cubes.
How many fewer green cubes than pink cubes do I have?



- (b) There are 7 markers and 3 scissors.
How many more markers than scissors are there?

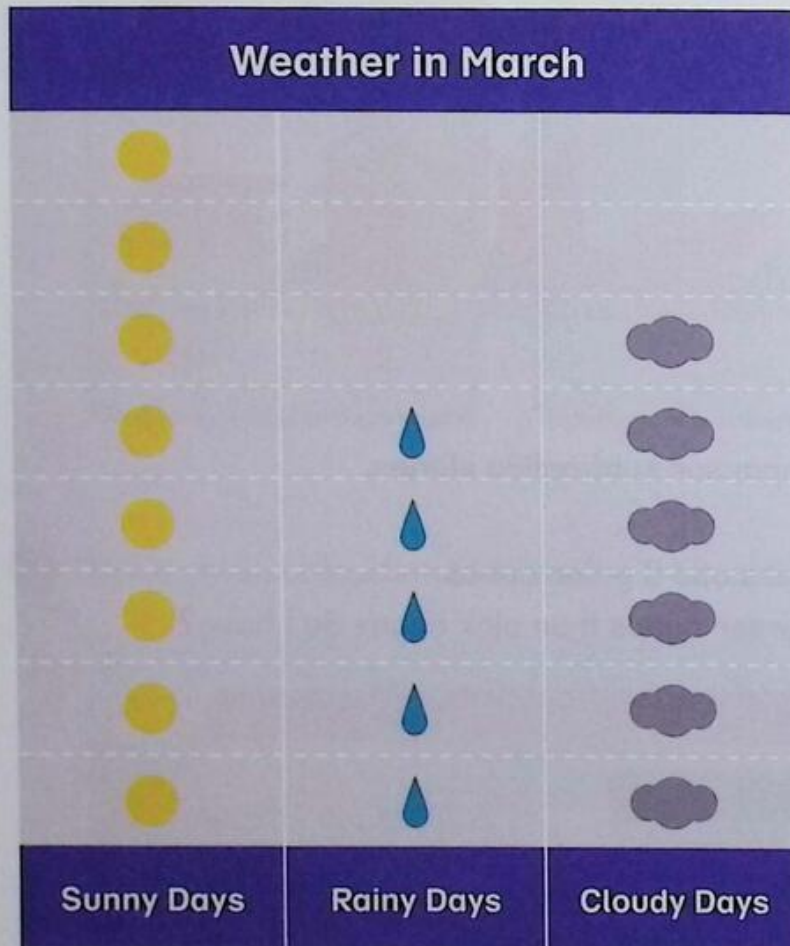


Lesson 3

Picture Graphs

3

Think



There were a lot of sunny days!



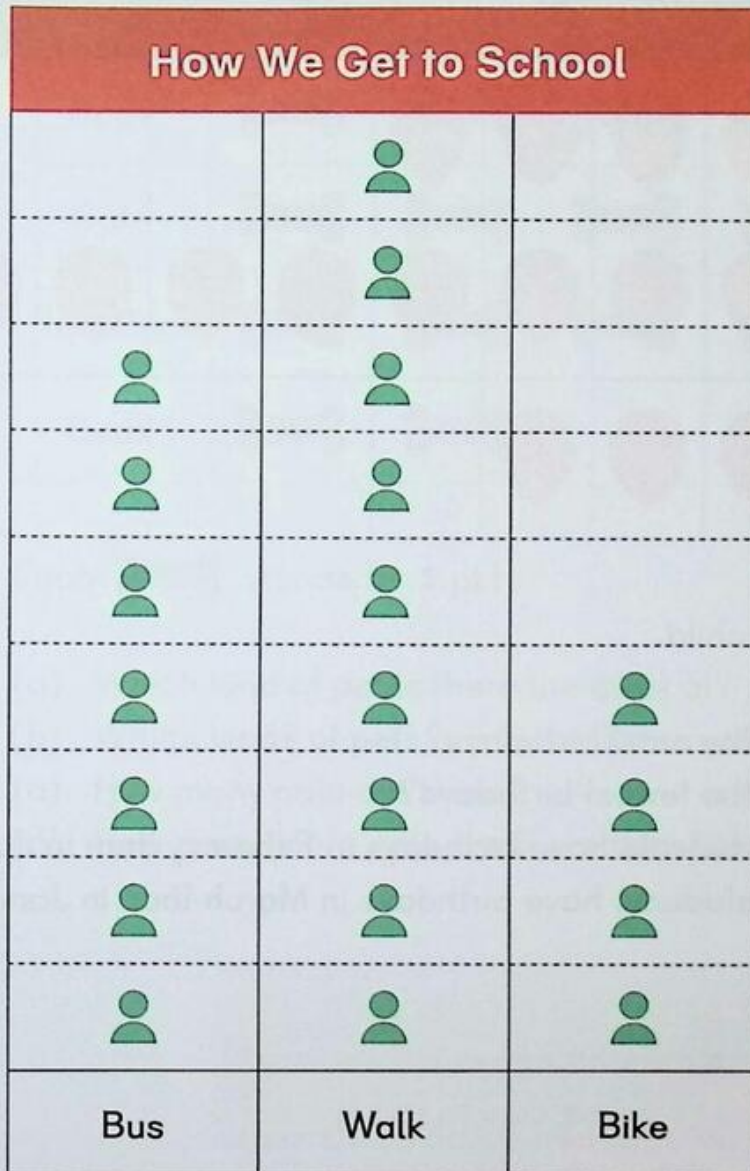
What can you tell from the graph?

Learn

- (a) Were there more sunny days or cloudy days?
- (b) Which type of day were there the fewest of?
- (c) How many more sunny days than rainy days were there?
- (d) How many fewer cloudy days than sunny days were there?

Do

1



What can I tell from the graph?



$$9 - 4 = \square$$



Each  stands for 1 child.

- (a) How do most children get to school?
- (b) How do the fewest children get to school?
- (c) How many more children walk than ride a bike?
- (d) How many fewer children ride a bike than take the bus?

2

Winter Birthdays

January									
February									
March									

Each  stands for 1 child.

- (a) What month has the most birthdays?
- (b) What month has the fewest birthdays?
- (c) How many more students have birthdays in February than in January?
- (d) How many fewer students have birthdays in March than in January?

A lot of us have birthdays in February.



3

Pets						
Dogs						
Cats						
Hamsters						
Birds						

Each  stands for 1 pet.

- Which kind of pet is there the most of?
- Which kinds of pets are there the same number of?
- How many cats are there?
- How many more cats are there than birds?

Our classroom aquarium has 16 fish.
How many more fish do we have than
the number of cats shown in the table?

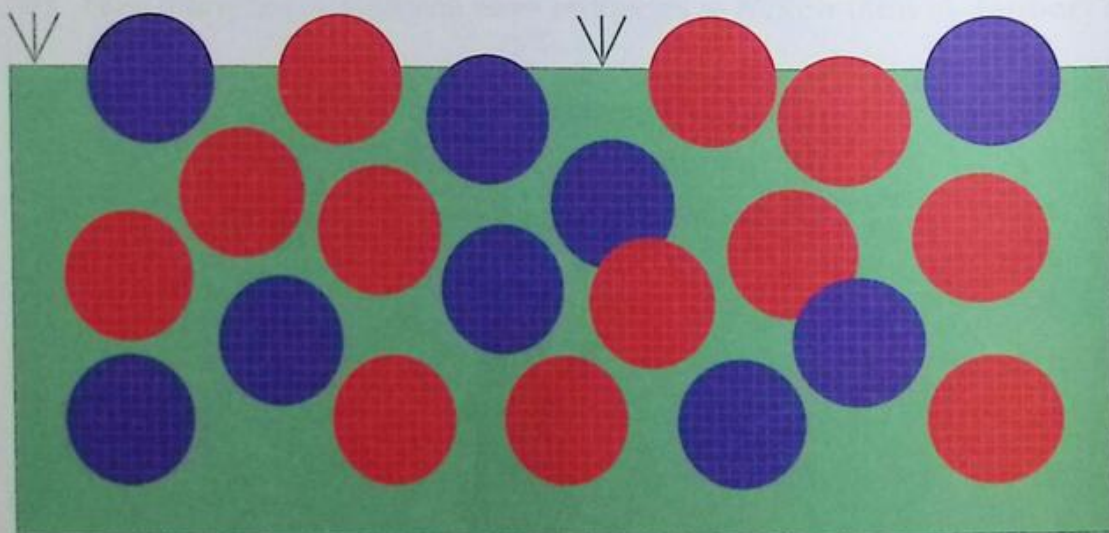


- 1 Look at the donuts and plates.



- (a) There are more _____ than _____.
- (b) There are fewer _____ than _____.

- 2 Look at the red balls and blue balls.



- (a) There are more _____ than _____.
- (b) There are fewer _____ than _____.
- (c) $12 - 9 =$

3

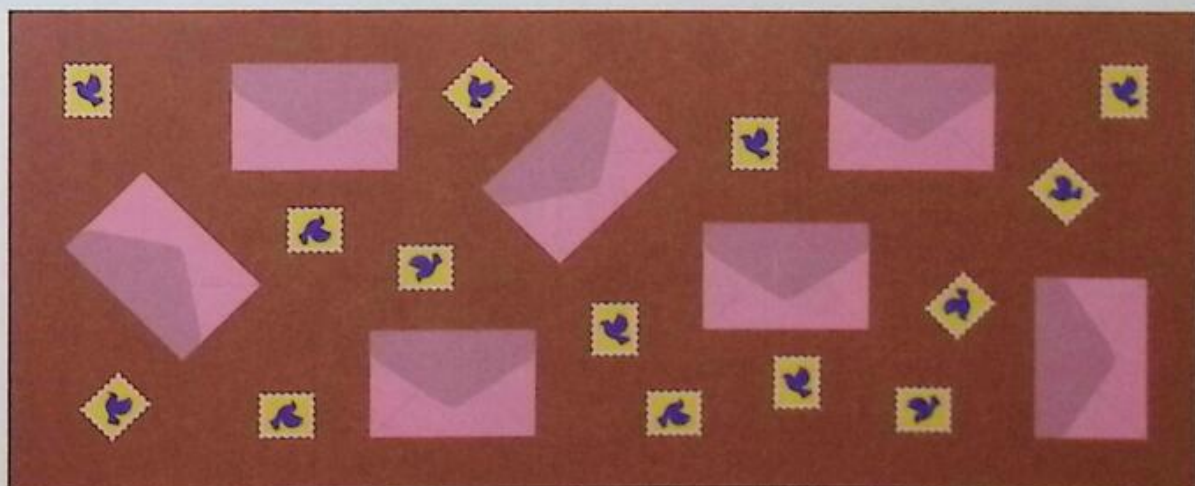


Are there more flamingos or shrimp?
How many more?

$$\square \bigcirc \square = \square.$$

There are $\square$ more _____ than _____.

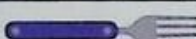
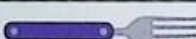
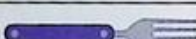
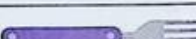
4



Make up a subtraction story for $14 - 7$.

5

Vegetables We Like

			
			
			
			
			
			
			
Peas	Broccoli	Corn	Asparagus

- (a)  children were asked which of the four vegetables they liked best.
- (b)  children liked peas.
- (c)  more children liked corn than broccoli.
- (d)  fewer children liked asparagus than corn.

6

Beads

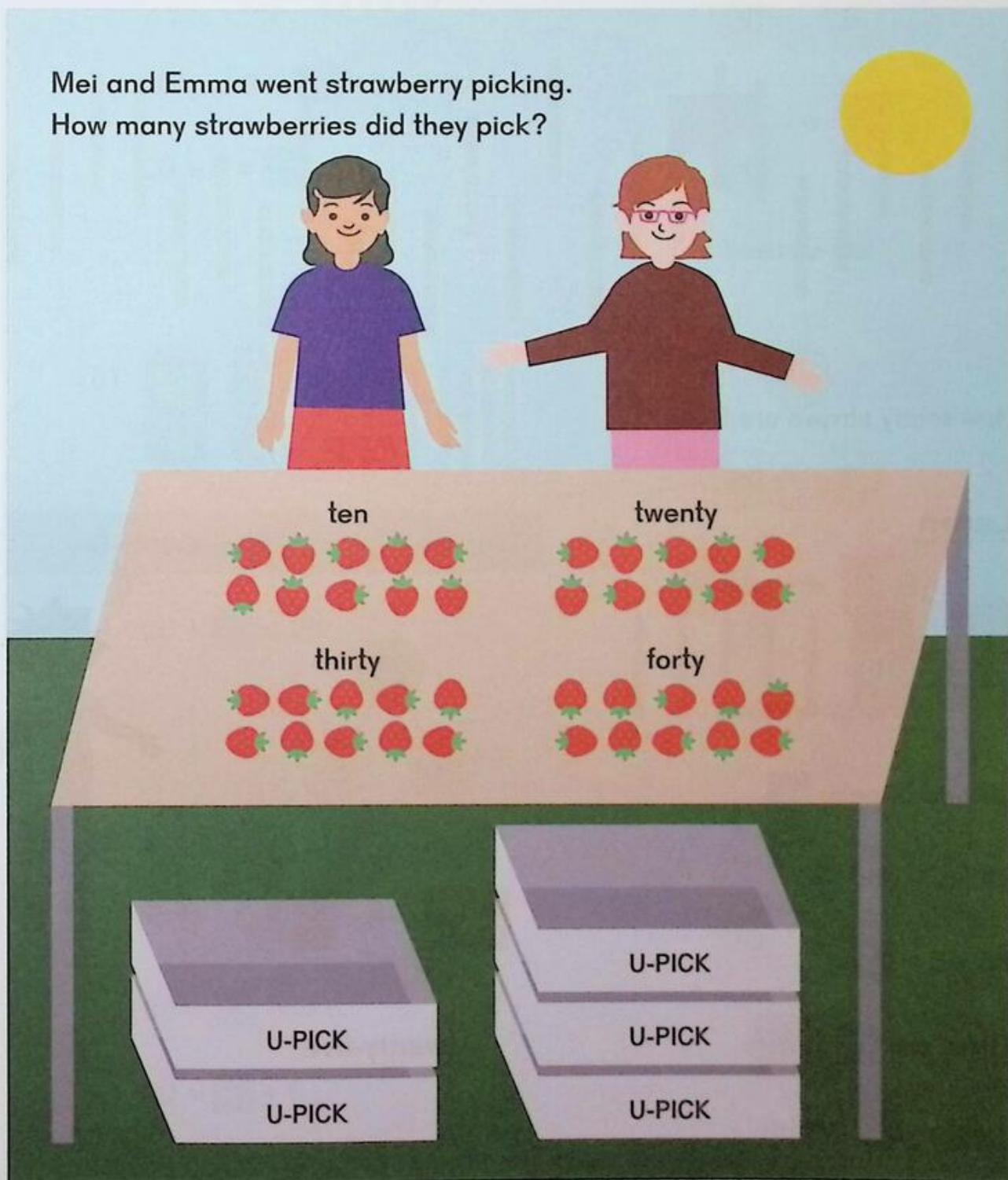
Blue									
Yellow									
Orange									
Green									

- (a) There are  blue beads.
- (b) There are 5 more _____ than _____.
- (c) There are 2 fewer _____ than _____.

Chapter 12

Numbers to 40

Mei and Emma went strawberry picking.
How many strawberries did they pick?



Lesson 1

Numbers to 40

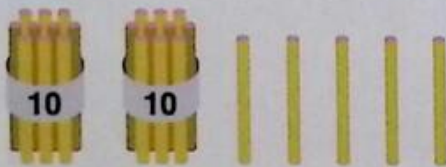
1

Think



How many straws are there?

Learn



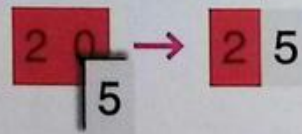
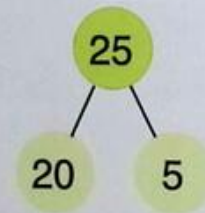
20 and 5 make .

25 is 20 and .

$20 + 5 =$.

There are straws.

Ten, twenty, twenty-one, twenty-two ...



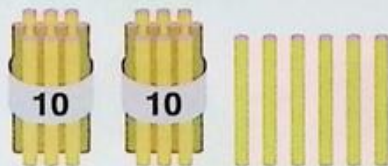
twenty-five



Do

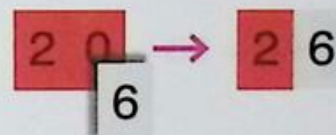
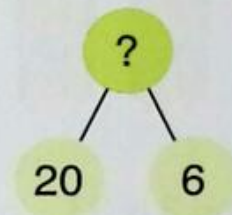
1

(a)



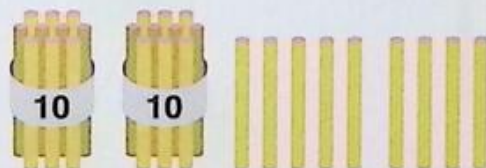
20 and 6 is .

$$20 + 6 = \text{}$$



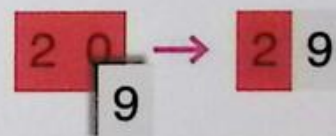
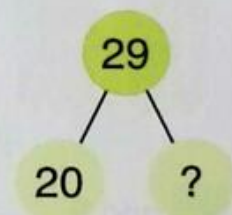
twenty-six

(b)



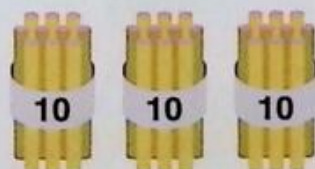
20 and is 29.

$$20 + \text{} = 29$$



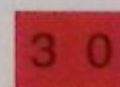
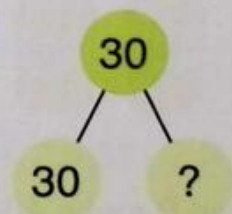
twenty-nine

(c)

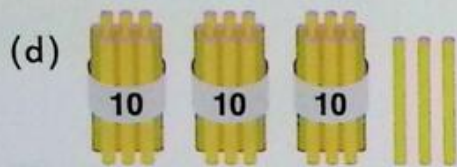


30 is and 0.

$$30 = \text{} + 0$$

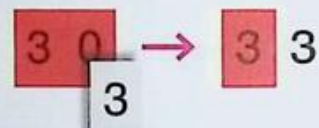
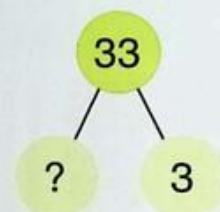


thirty



and 3 is 33.

+ 3 = 33

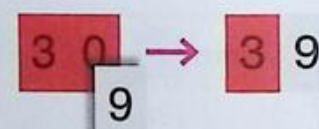
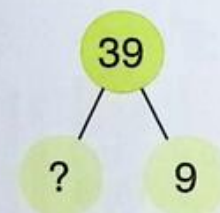


thirty-three



39 is and 9.

39 = + 9

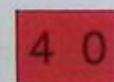
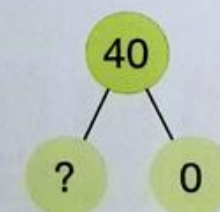


thirty-nine



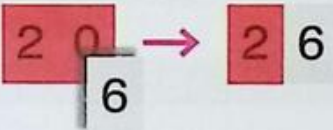
and 0 make 40.

40 + = 40



forty

② Show the numbers.

(a) 26  

(b) 23

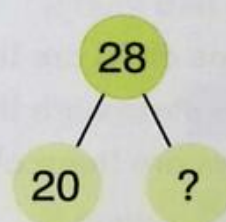
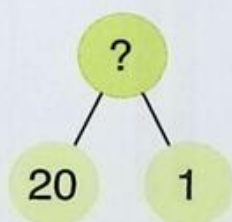
(c) 32

(d) 33

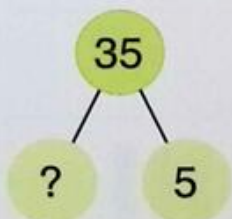
(e) 40

③ (a) $20 + 1 = \square$

(b) $20 + \square = 28$



(c) $\square + 5 = 35$



④ (a) $30 + 2 = \square$

(b) $\square + 7 = 37$

(c) $20 + \square = 20$

(d) $\square = 30 + 6$

(e) $24 = 20 + \square$

(f) $5 + 30 = \square$

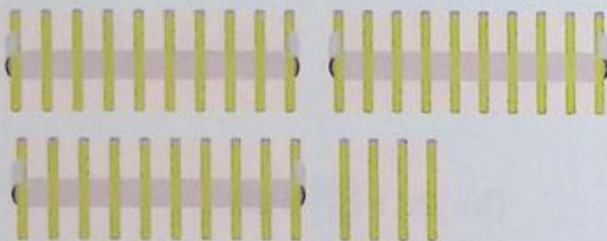
Lesson 2

Tens and Ones

2

Think

Count the straws by making groups of 10.



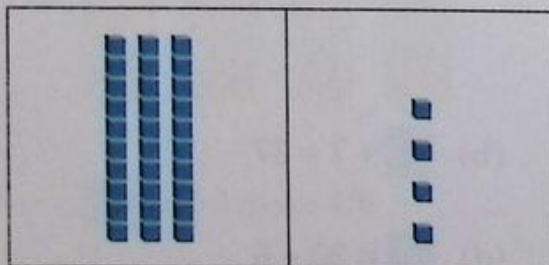
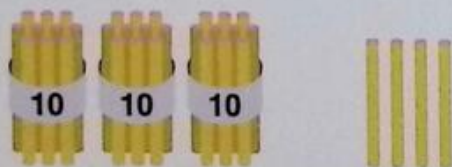
How many groups of 10 are there?

How many loose straws are there?

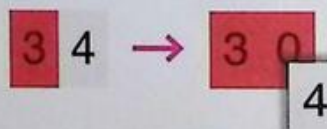
How many straws are there altogether?

Learn

Show the number on a place-value chart.



Tens	Ones
3	4



The digits in the number 34 are 3 and 4.

3 tens = 30

4 ones = 4

3 tens and 4 ones make .

$30 + 4 =$.

Do

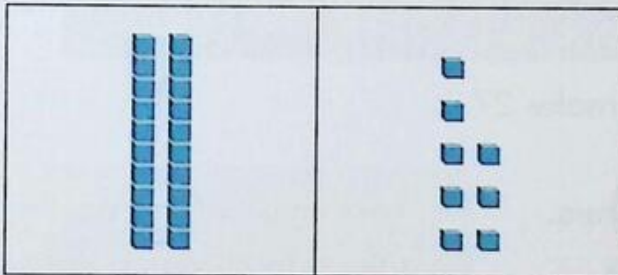
① (a) 1 ten = ones.



(b) 10 ones = ten.



② (a)



2 tens and 8 ones is .

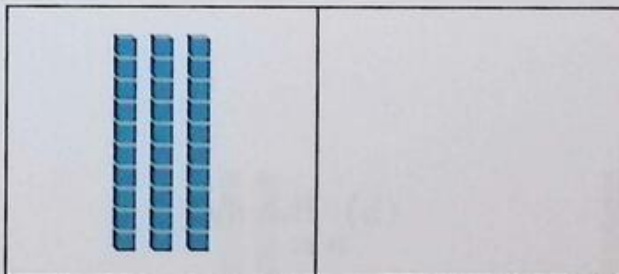
2 tens =

8 ones =

$20 + 8 =$

Tens	Ones
2	8

(b)



30 is tens and ones.

3 tens =

ones = 0

$30 =$ + 0

Tens	Ones
3	0

3 Show the numbers on a place-value chart.

(a) 20

(b) 22

(c) 13

(d) 31

(e) 39

(f) 40

4 (a) 21 is tens and ones.

(b) 2 tens and ones make 27.

(c) is 3 tens and 0 ones.

(d) 1 one and 3 tens make .

(e) There are tens in 40.

(f) There are ones and 2 tens in 23.

5 Write the number.

(a) thirty

(b) twenty

(c) forty

(d) thirty-four

(e) twenty-seven

(f) thirty-one

(g) thirty-eight

(h) twenty-two

Lesson 3

Counting by Tens and Ones

3

Think

1	2	3	4	5	6	7	8	9	10
11	12	13	14		16	17	18		20
	22	23	24	25	26		28	29	
	32	33	34			37	38	39	40

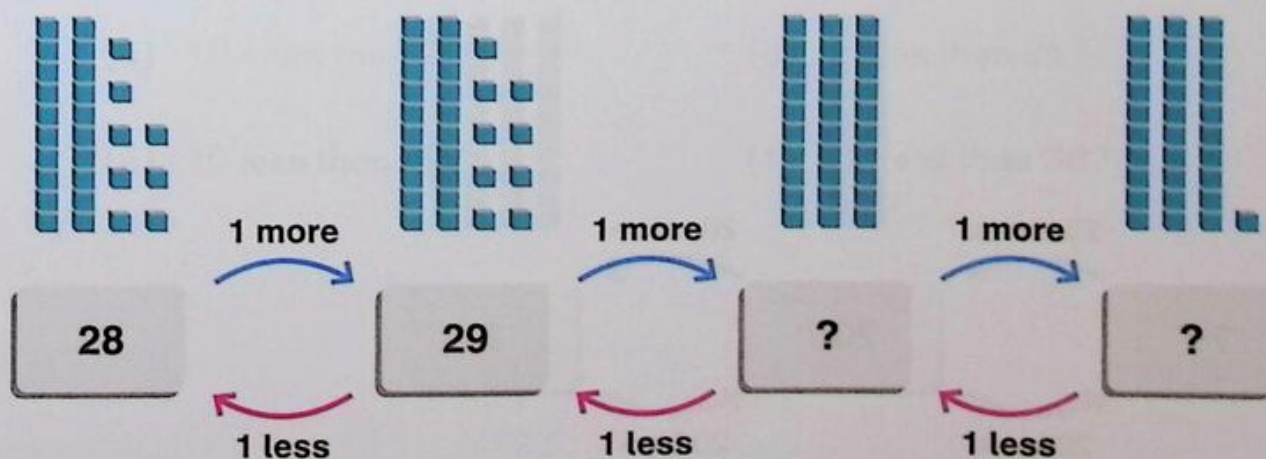


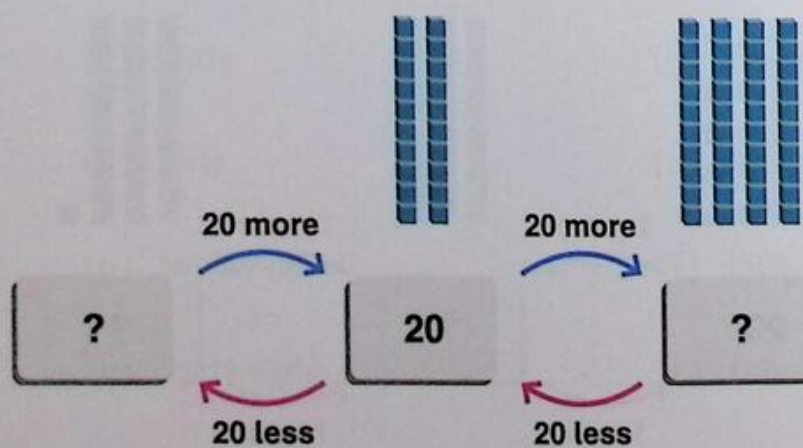
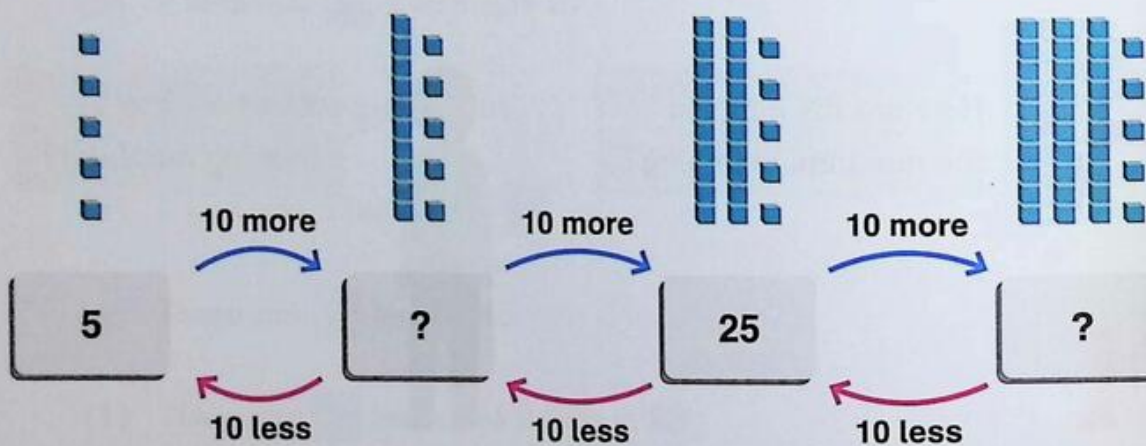
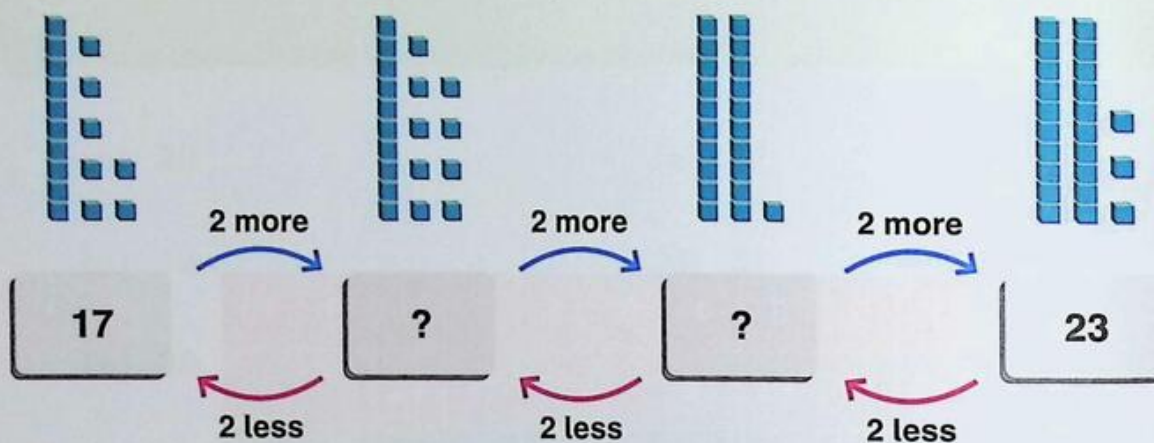
How are the digits in the numbers changing?



What are the missing numbers?

Learn





Do

- ① What are the missing numbers?

1	2	3		5		7	8	9	10
11		13	14		16		18	19	20
	22		24	25		27			30
	32	33			36	37	38		40

- ② (a) Count on by ones from 17 to 23.

(b) Count back by ones from 33 to 27.

(c) Count on by tens from 6 to 36.

(d) Count back by tens from 33 to 3.

- ③ What number is ...

(a) 1 more than 29?

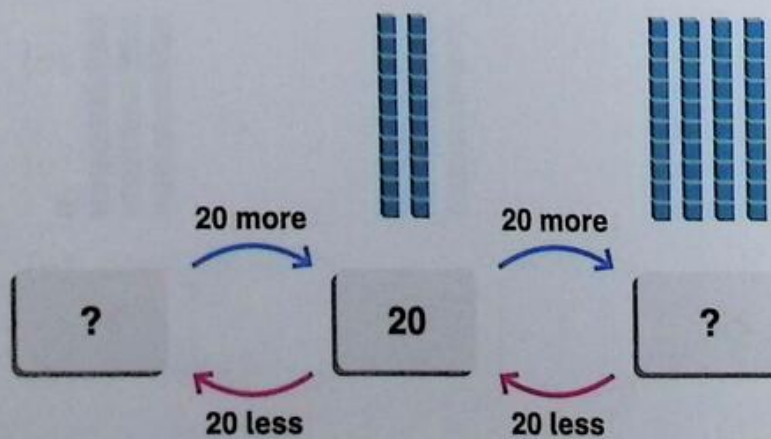
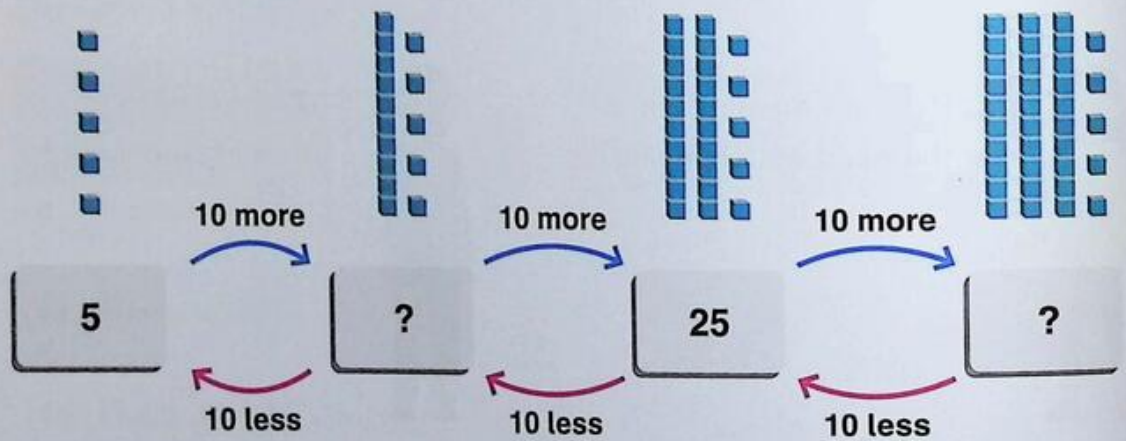
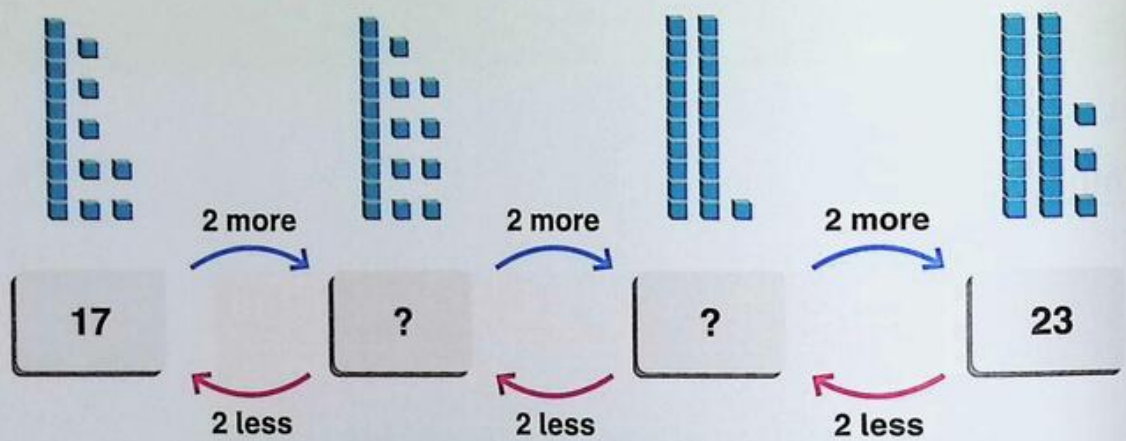
(b) 2 more than 33?

(c) 10 more than 27?

(d) 2 less than 21?

(e) 10 less than 40?

(f) 20 less than 30?



Do

- ① What are the missing numbers?

1	2	3		5		7	8	9	10
11		13	14		16		18	19	20
	22		24	25		27			30
	32	33			36	37	38		40

- ② (a) Count on by ones from 17 to 23.

(b) Count back by ones from 33 to 27.

(c) Count on by tens from 6 to 36.

(d) Count back by tens from 33 to 3.

- ③ What number is ...

(a) 1 more than 29?

(b) 2 more than 33?

(c) 10 more than 27?

(d) 2 less than 21?

(e) 10 less than 40?

(f) 20 less than 30?

4 What are the missing numbers?

(a)

28	29		31		33
----	----	--	----	--	----

(b)

	33	32		30	
--	----	----	--	----	--

(c)

25	27		31		35
----	----	--	----	--	----

(d)

	10	20		40
--	----	----	--	----

(e)

3		23	
---	--	----	--

5 (a) $28 + 1 = \square$

(b) $39 - 10 = \square$

(c) $37 - 1 = \square$

(d) $1 + 19 = \square$

(e) $2 + 22 = \square$

(f) $40 - 2 = \square$

(g) $\square + 10 = 36$

(h) $33 - \square = 23$

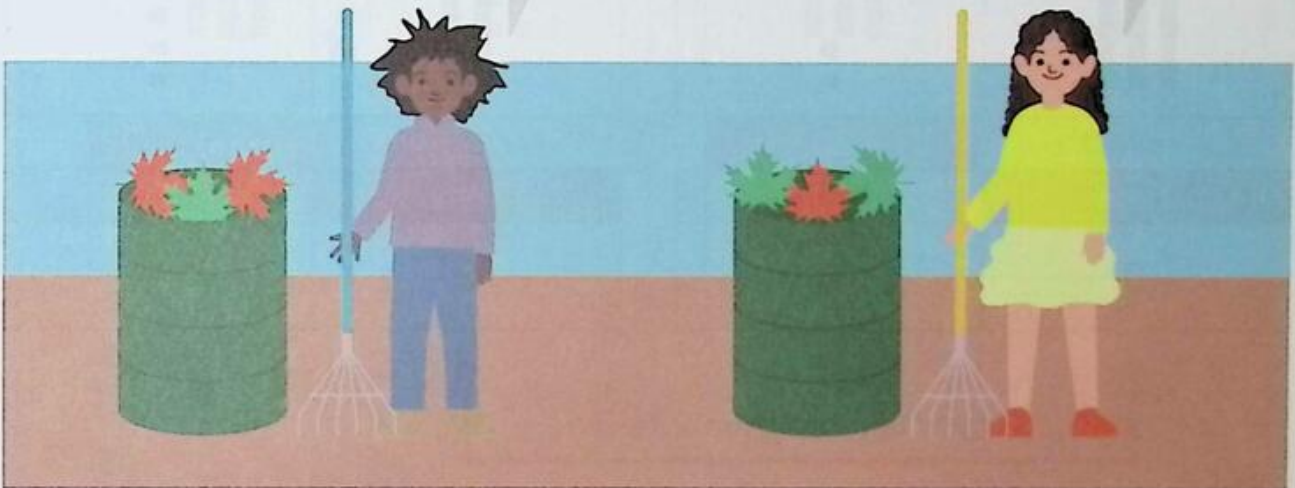
(i) $\square = 32 - 20$

(j) $29 + \square = 31$

Think

I raked 32 leaves.

I raked 24 leaves.



Who raked more leaves, Dion or Sofia?

I raked 23 leaves.

I raked 25 leaves.

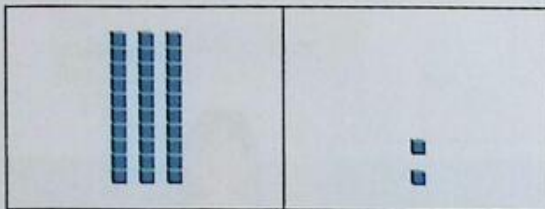


Who raked fewer leaves, Mei or Alex?

Learn

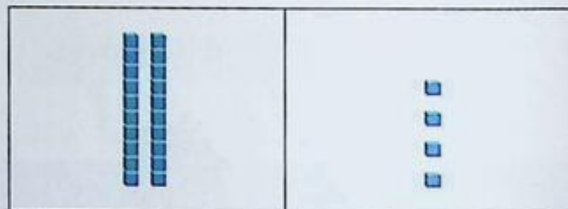
Compare.

Dion



Tens	Ones
3	2

Sofia

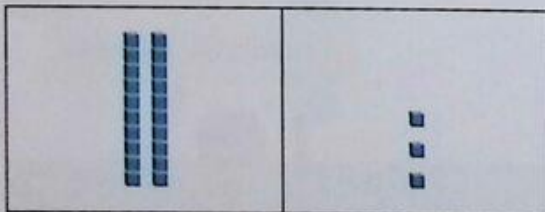


Tens	Ones
2	4

3 tens is more than 2 tens.

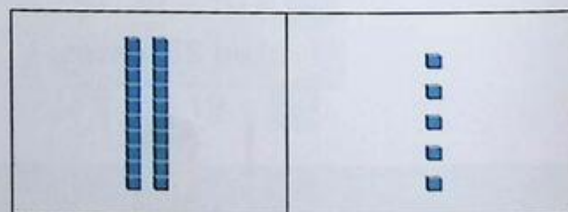
_____ raked more leaves than _____.

Mei



Tens	Ones
2	3

Alex



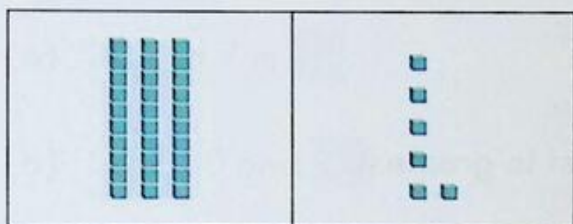
Tens	Ones
2	5

3 ones is less than 5 ones.

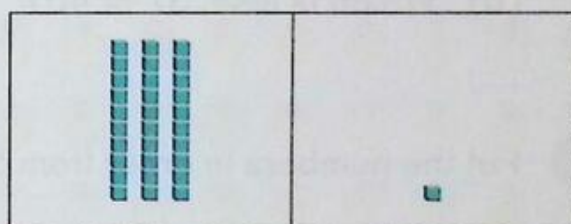
_____ raked fewer leaves than _____.

Do

- ① Compare 36 and 31.



Tens	Ones
3	6

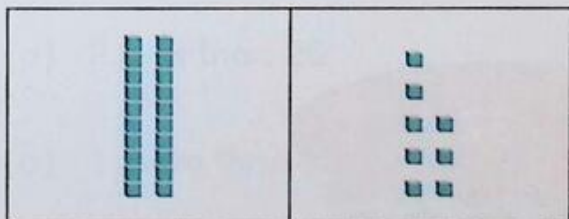


Tens	Ones
3	1

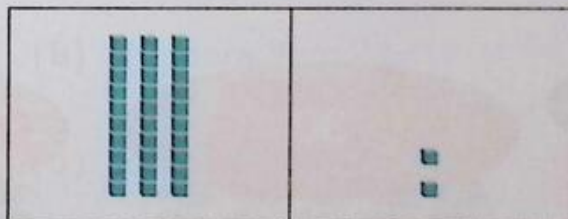
36 is greater than 31.

31 is less than 36.

- ② Compare 28 and 32.



Tens	Ones
2	8



Tens	Ones
3	2

32 is greater than 28.

28 is less than 32.

3 (a) Which is greater, 25 or 27?

(b) Which is less, 37 or 40?

4 Put the numbers in order from least to greatest.

(a)

25

19

37

40

(b)

26

32

36

37

(c)

23

6

17

27

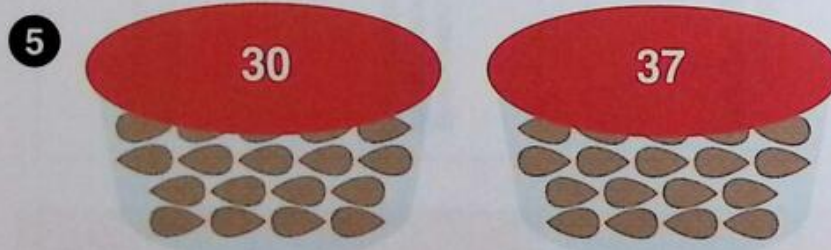
(d)

23

12

32

21



Sofia has 30 almonds.

Emma has 37 almonds.

(a) Who has more almonds?

(b) How many more?

1 (a) 30 and 7 is .

(b) 37 is 30 and .

(c) $30 + 7 =$.

(d) 37 is tens and ones.



2 (a) 2 tens and 3 ones is .

(b) is 3 tens and 2 ones.

(c) 25 has ones and 2 tens.

(d) Thirty-four ones is .

3 What number is ...?

(a) 2 less than 26

(b) 10 more than 21

(c) 1 more than 39

(d) 20 less than 37

4 What are the missing numbers?

(a) 33 32 31

(b) 28 30 34

5 (a) $\square + 3 = 33$

(b) $24 = \square + 4$

(c) $26 + 1 = \square$

(d) $19 + 2 = \square$

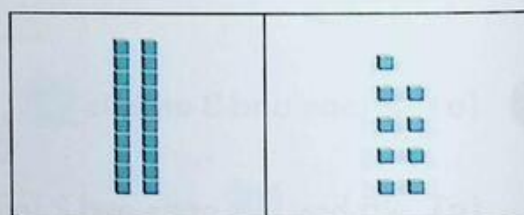
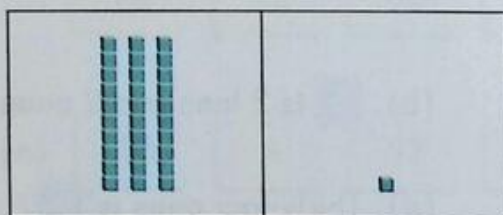
(e) $34 - 10 = \square$

(f) $23 + 10 = \square$

(g) $\square + 2 = 24$

(h) $36 - \square = 16$

6 Compare 31 and 29.



Tens	Ones
3	1

Tens	Ones
2	9

(a) $\square$ is greater than $\square$.

(b) $\square$ is 2 more than 29.

(c) $\square$ is less than $\square$.

(d) $\square$ is 2 less than 31.

7 Put the numbers in order from least to greatest.

30

15

7

25

29

32

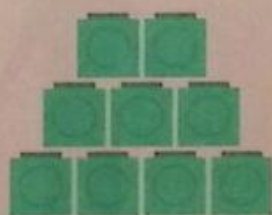
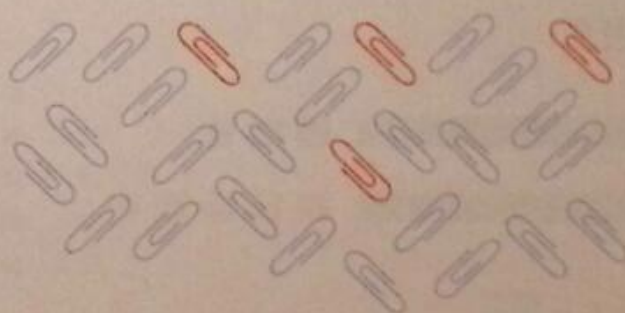
Chapter 13

Addition and Subtraction Within 40

How many of each item are there?

How many more paper clips are there than bears?

How many more silver paper clips are there than red paper clips?

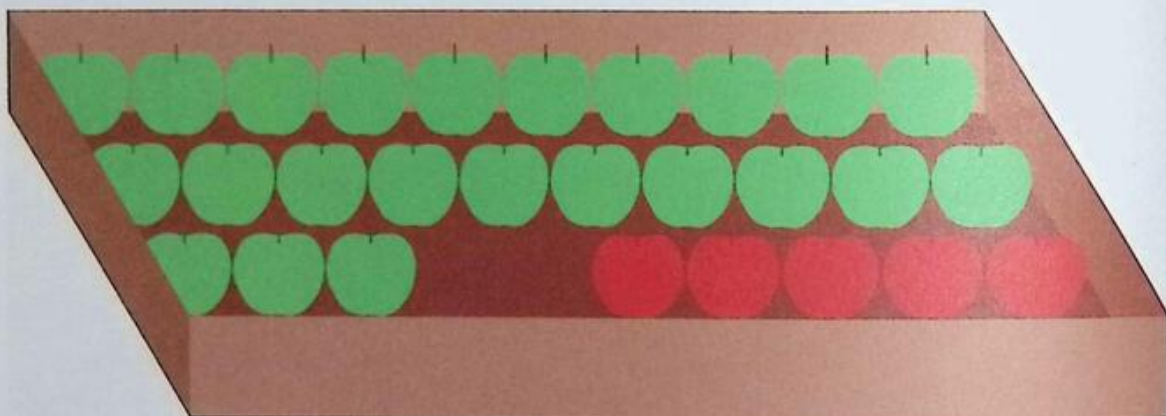


Lesson 1

Add Ones

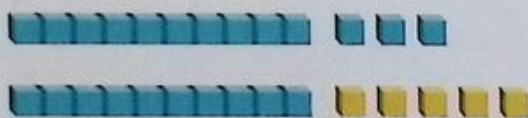
1

Think



Emma picks 23 green apples and 5 red apples.
How many apples does she pick altogether?

Learn



$$23 + 5 = \square$$

She picks $\square$ apples altogether.

$$\begin{array}{c} 23 + 5 \\ \swarrow \quad \searrow \\ 20 \quad 3 \end{array}$$

$$3 + 5 = 8$$

20 and 8 make ...

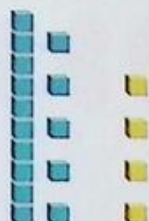


Do

① (a) $5 + 4 =$



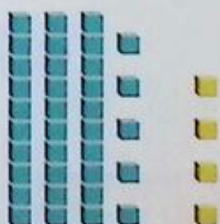
(b) $15 + 4 =$



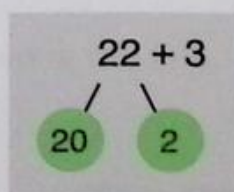
(c) $25 + 4 =$



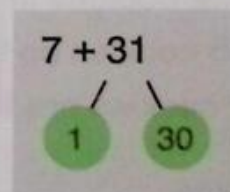
(d) $35 + 4 =$



② (a) $22 + 3 =$



(b) $7 + 31 =$



3 (a) $24 + 4 = \square$

(b) $38 + 0 = \square$

(c) $37 + 1 = \square$

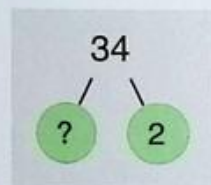
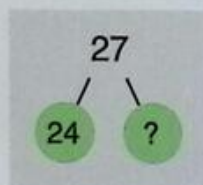
(d) $6 + 22 = \square$

(e) $\square = 35 + 3$

(f) $\square = 3 + 26$

4 (a) $24 + \square = 27$

(b) $\square + 2 = 34$

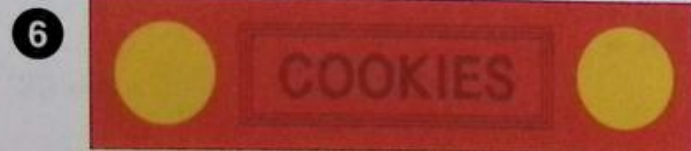


5 (a) $\square + 21 = 28$

(b) $33 + \square = 39$

(c) $13 + \square = 17$

(d) $\square + 26 = 28$



There are 32 cookies in the box.
There are 5 cookies on the plate.
How many cookies are there altogether?

There are $\square$ cookies altogether.

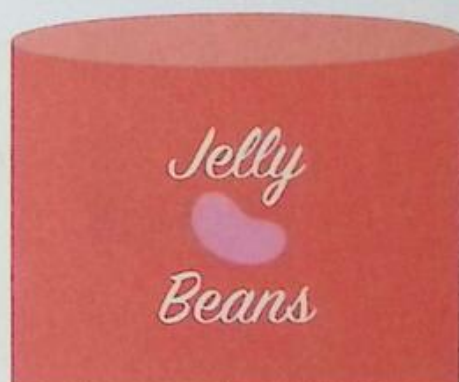
$\square \bigcirc \square = \square$

Lesson 2

Subtract Ones

2

Think

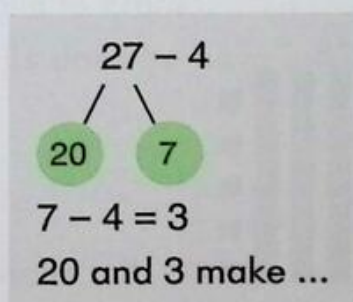
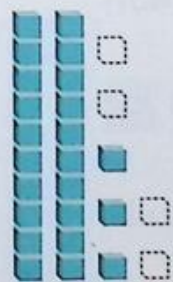


There are 27 jelly beans.

Mei eats 4 jelly beans.

How many jelly beans are left?

Learn



$$27 - 4 = \boxed{}$$

$\boxed{}$ jelly beans are left.



Do

1 (a) $8 - 3 = \square$



(b) $18 - 3 = \square$



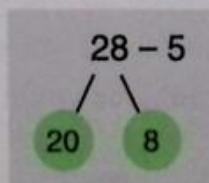
(c) $28 - 3 = \square$



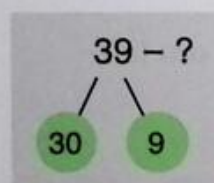
(d) $38 - 3 = \square$



2 (a) $28 - 5 = \square$



(b) $39 - \square = 32$



8

3 (a) $37 - 2 = \square$

(b) $27 - 3 = \square$

(c) $22 - 2 = \square$

(d) $39 - 0 = \square$

(e) $\square = 25 - 3$

(f) $27 - \square = 20$

(g) $35 - \square = 33$

(h) $40 - \square = 40$

4



Alex has 26 colored pencils altogether.
He lends 3 colored pencils to Emma.
How many colored pencils does he have left?

$\square \bigcirc \square = \square$

Alex has $\square$ colored pencils left.

5

There are 36 red grapes and 5 green grapes.
How many fewer green grapes are there than red grapes?

$\square \bigcirc \square = \square$

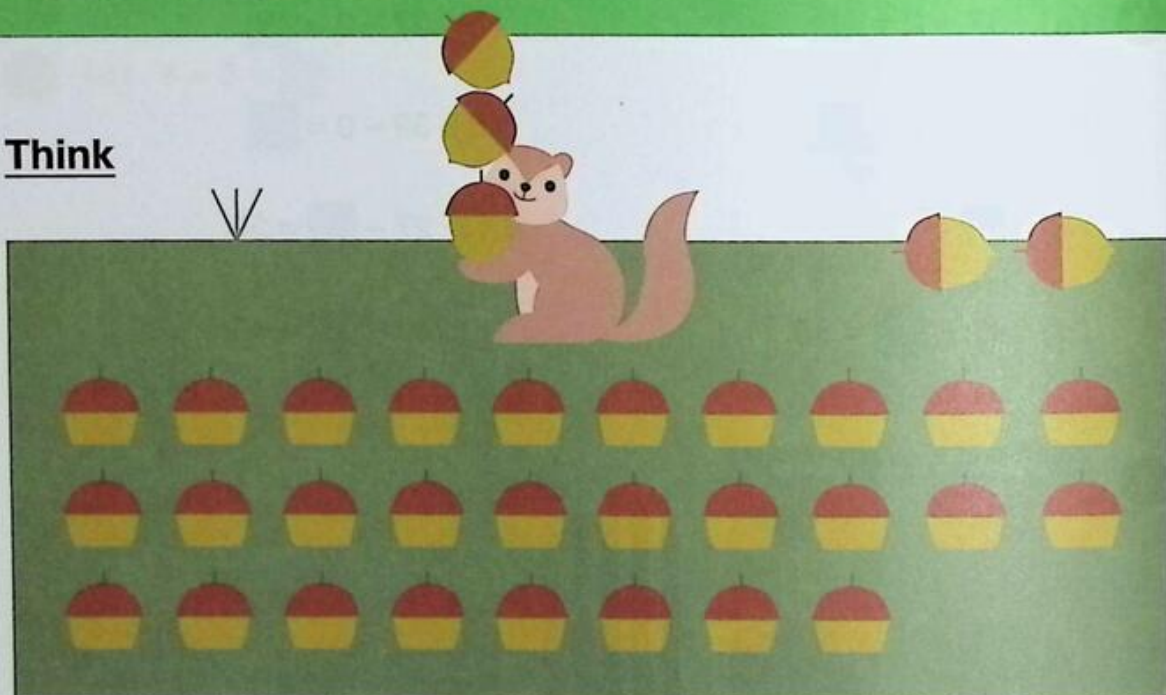
There are $\square$ fewer green grapes than red grapes.

Lesson 3

Make the Next Ten

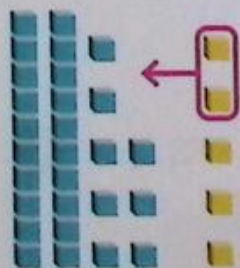
3

Think



The squirrel buried 28 acorns.
She will bury 5 more acorns.
How many acorns will she bury in all?

Learn



$$28 + 5$$

2

3

$$28 + 2 = 30$$

30 and 3 make ...

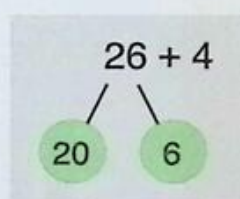
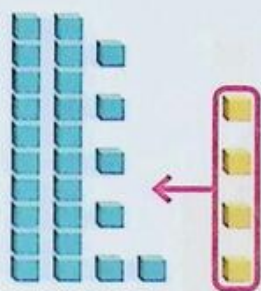


$$28 + 5 = \square$$

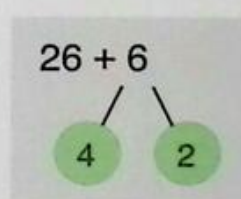
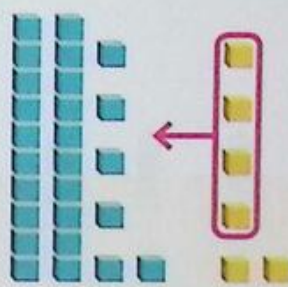
She will bury $\square$ acorns in all.

Do

① (a) $26 + 4 = \square$



(b) $26 + 6 = \square$



② $8 + \square = 10$

$28 + \square = 30$

$28 + 5 = \square$

③ (a) $17 + 3 = \square$

$17 + 6 = 20 + \square$

$17 + 6 = \square$

(b) $25 + 5 = \square$

$25 + 8 = 30 + \square$

$25 + 8 = \square$

(c) $12 + 8 = \square$

$12 + 9 = 20 + \square$

$12 + 9 = \square$

④ (a) $\square + 21 = 30$

(b) $33 + \square = 40$

(c) $27 + 6 = \square$

(d) $13 + 9 = \square$

(e) $4 + 28 = \square$

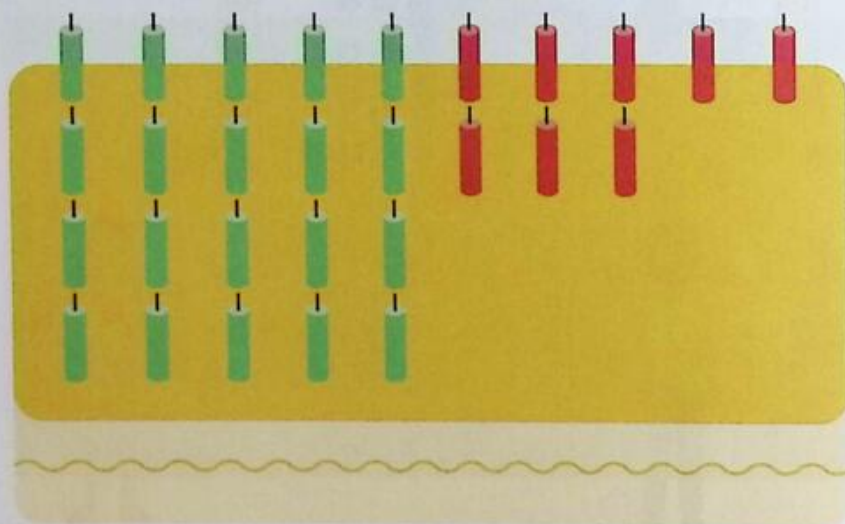
(f) $5 + 35 = \square$

Lesson 4

Use Addition Facts

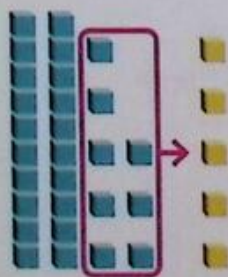
4

Think



Alex put 28 candles on the cake.
He will put 5 more candles on the cake.
How many candles will he put on the cake in all?

Learn



$$28 + 5 = \boxed{}$$

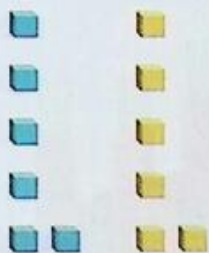
He will put $\boxed{}$ candles on the cake total.

$$\begin{array}{r} 28 + 5 \\ \swarrow \quad \searrow \\ 20 \quad 8 \\ 8 + 5 = 13 \\ 20 \text{ and } 13 \text{ make } \dots \end{array}$$

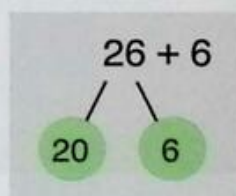
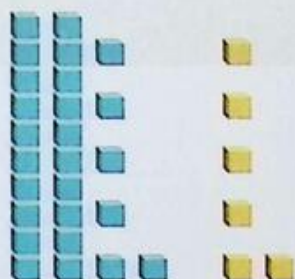


Do

① (a) $6 + 6 =$



(b) $26 + 6 =$



② $8 + 4 =$ $10 + 12 =$ $18 + 4 =$

③ (a) $9 + 3 =$ $19 + 3 =$ $29 + 3 =$

(b) $5 + 6 =$ $15 + 6 =$ $25 + 6 =$

(c) $8 + 6 =$ $8 + 16 =$ $8 + 26 =$

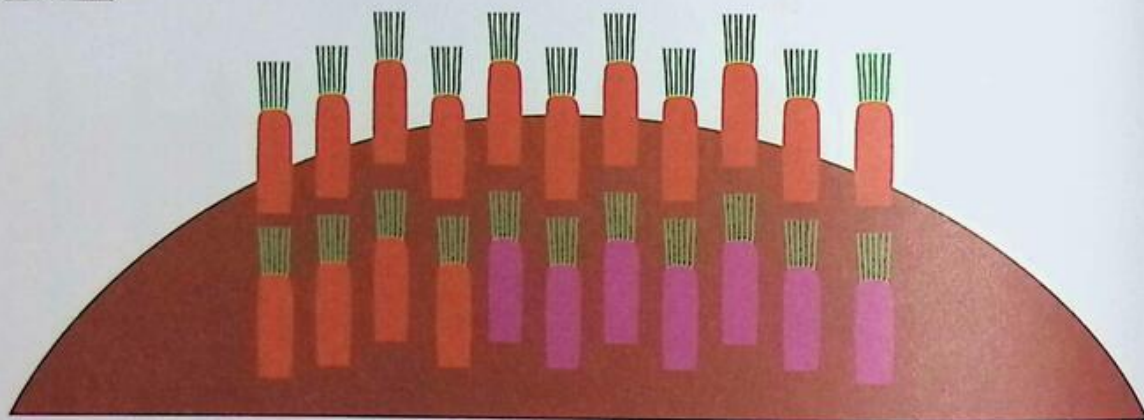
- ④ There are 26 children at a park.
8 more children come.
There are children altogether.

Lesson 5

Subtract from Tens

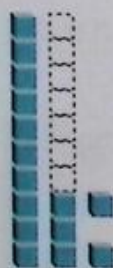
5

Think



A gardener grows 22 carrots.
7 of them are purple.
The rest are orange.
How many orange carrots are there?

Learn



$$22 - 7 = \square$$

$\square$ carrots were orange.

$$\begin{array}{r} 22 - 7 \\ \swarrow \quad \searrow \\ 12 \quad 10 \\ 10 - 7 = 3 \\ 12 \text{ and } 3 \text{ make } \dots \end{array}$$



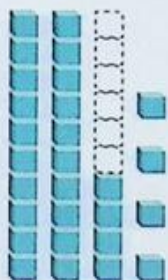
$$\begin{array}{r} 22 - 7 \\ \swarrow \quad \searrow \\ 2 \quad 20 \\ 20 - 7 = 13 \\ 13 \text{ and } 2 \text{ make } \dots \end{array}$$



6

Do

① $34 - 6 = \square$



$$\begin{array}{r} 34 - 6 \\ \swarrow \quad \searrow \\ 24 \quad 10 \\ 10 - 6 = 4 \\ 24 + 4 = ? \end{array}$$



$$\begin{array}{r} 34 - 6 \\ \swarrow \quad \searrow \\ 4 \quad 30 \\ 30 - 6 = 24 \\ 24 + 4 = ? \end{array}$$



② (a) $20 - 8 = \square$

$23 - 8 = \square + 3$

$23 - 8 = \square$

(b) $30 - 9 = \square$

$35 - 9 = \square + 5$

$35 - 9 = \square$

(c) $30 - 5 = \square$

$34 - 5 = \square + 4$

$34 - 5 = \square$

③ (a) $20 - \square = 16$

(b) $30 - \square = 27$

(c) $22 - 9 = \square$

(d) $32 - 4 = \square$

(e) $32 - 5 = \square$

(f) $26 - 7 = \square$

(g) $25 - 8 = \square$

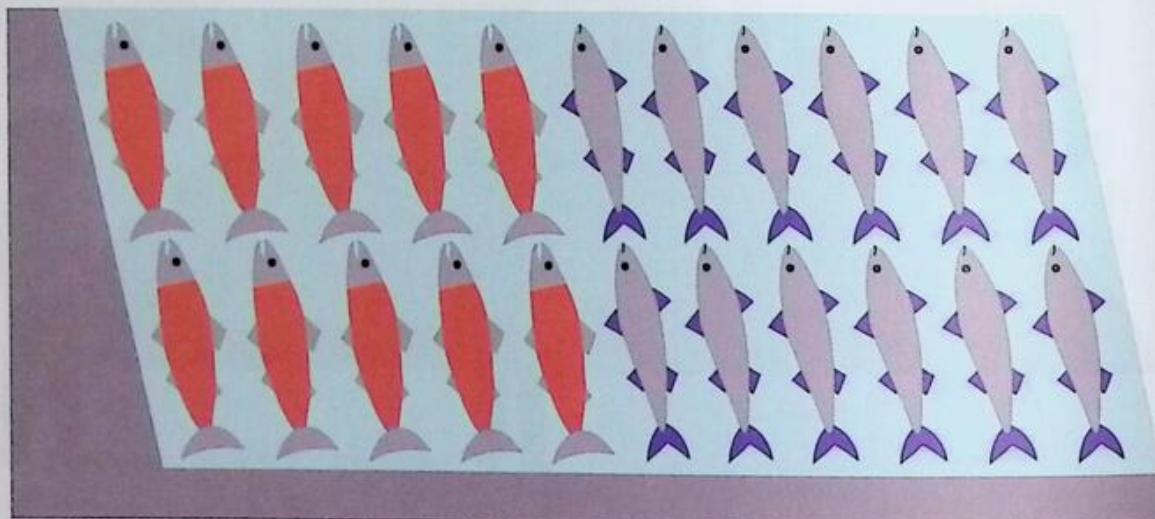
(h) $21 - 6 = \square$

Lesson 6

Use Subtraction Facts

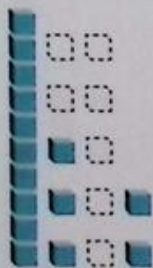
6

Think



A store has 22 fish.
It sells 7 fish.
How many fish are left?

Learn



$$22 - 7 = \square$$

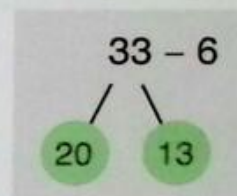
$\square$ fish are left.

$$\begin{array}{c} 22 - 7 \\ \swarrow \quad \searrow \\ 10 \quad 12 \\ 12 - 7 = 5 \\ 10 \text{ and } 5 \text{ make } \dots \end{array}$$

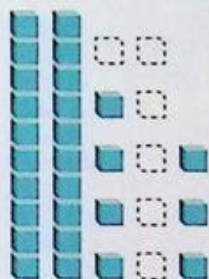


Do

① (a) $13 - 6 = \square$



(b) $33 - 6 = \square$



② (a) $14 - 7 = \square$

$24 - 7 = \square$

(b) $15 - 8 = \square$

$25 - 8 = \square$

(c) $16 - 9 = \square$

$36 - 9 = \square$

③ (a) $21 - 8 = \square$

(b) $24 - 5 = \square$

(c) $32 - 7 = \square$

(d) $21 - 9 = \square$

④ (a) There are 36 eggs.
9 eggs hatched already.
 $\square$ eggs have not yet hatched.

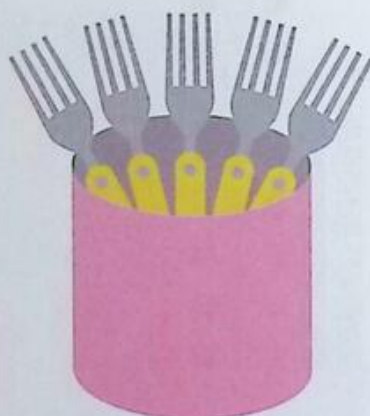
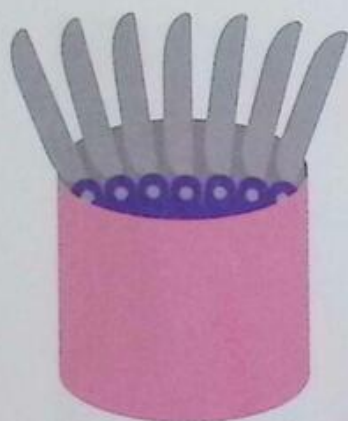
(b) There are 22 crows.
There are 6 robins.
There are $\square$ more crows than robins.

Lesson 7

Add Three Numbers

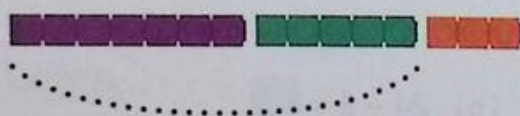
7

Think

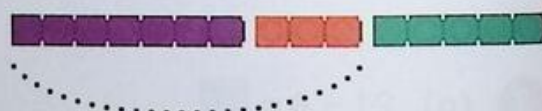


There are 7 knives, 5 forks, and 3 spoons.
How many pieces of silverware are there in all?

Learn



$$\begin{aligned} 7 + 5 &= 12 \\ 12 + 3 &= \dots \end{aligned}$$



$$\begin{aligned} 7 + 3 &= 10 \\ 10 + 5 &= \dots \end{aligned}$$

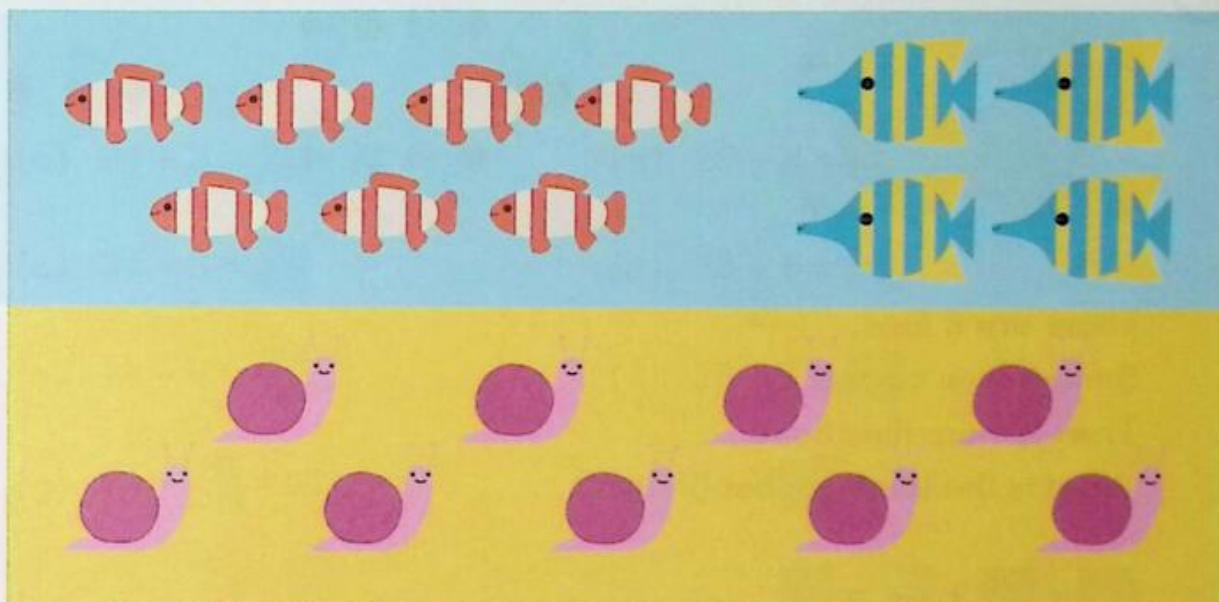


$$7 + 5 + 3 = \square$$

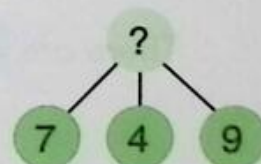
There are $\square$ pieces of silverware in all.

Do

1



There are 7 clownfish, 4 angelfish, and 9 snails.
How many sea creatures are there altogether?



$$7 + 4 + 9 = ?$$



$$\begin{aligned} 7 + 4 &= 11 \\ 11 + 9 &= \dots \end{aligned}$$



$$\begin{aligned} 9 + 7 &= 16 \\ 16 + 4 &= \dots \end{aligned}$$

$$7 + 4 + 9 = \square$$

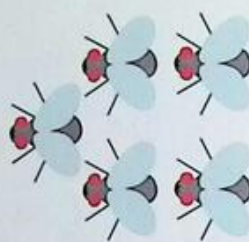
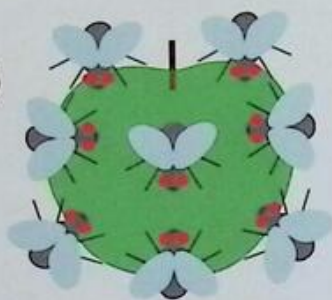
2 (a) $6 + 5 + 4 = 6 + \square + 5$

(b) $9 + 9 + 1 = \square + 1 + 9$

(c) $3 + 8 + 4 = 8 + 4 + \square$

(d) $1 + 2 + 3 = \square + 2 + 1$

3



There are 8 flies.
5 more flies come.
Then 2 more flies come.
What is the total number of flies?

$$\square + \square + \square = \square$$

There are $\square$ flies.

4



Mei, Sofia, and Dion each have 7 pieces of chalk.
How many pieces of chalk do they have in all?

They have $\square$ pieces of chalk in all.

5

(a) $7 + 3 + 8 = \square$

(b) $9 + 6 + 4 = \square$

(c) $1 + 7 + 9 = \square$

(d) $5 + 5 + 5 = \square$

(e) $8 + 8 + 5 = \square$

(f) $8 + 8 + 8 = \square$

1 (a) $24 + 3 = \square$

(b) $29 - 8 = \square$

(c) $31 + 6 = \square$

(d) $33 + 5 = \square$

(e) $28 - 4 = \square$

(f) $29 - 7 = \square$

(g) $22 + \square = 27$

(h) $35 - \square = 31$

2 (a) $27 + 3 = \square$

(b) $30 - 4 = \square$

(c) $18 + 7 = \square$

(d) $22 - 5 = \square$

(e) $34 - 6 = \square$

(f) $9 + 25 = \square$

- 3 There are 28 gumdrops and 3 gumballs.
How many candies are there in all?



- 4 A shop has 25 pairs of glasses.
4 pairs are sold.
How many pairs of glasses are still in the shop?



- 5 There are 22 dogs and 7 cats at the shelter.
How many more dogs are there than cats?



6 (a) $\square + 21 = 26$

(b) $20 - \square = 15$

(c) $15 + \square = 28$

(d) $\square = 33 - 7$

(e) $18 + 8 = 20 + \square$

(f) $24 + 7 = \square + 11$

(g) $23 - 6 = 14 + \square$

(h) $23 - 8 = \square + 3$

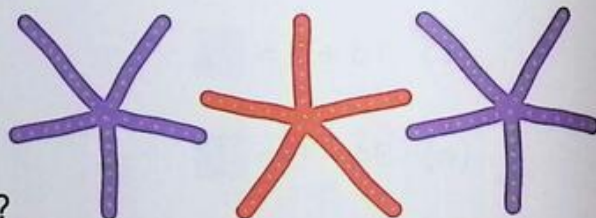
7 (a) $6 + 4 + 9 = \square$

(b) $8 + 7 + 2 = \square$

(c) $4 + 4 + 4 = \square$

(d) $5 + 1 + 6 = 1 + 6 + \square$

- 8 There are 34 starfish.
8 starfish are purple.
The rest are orange.
How many orange starfish are there?



- 9 There are 17 tennis balls and 9 baseballs in the gym.
(a) How many balls are there in all?
(b) How many fewer baseballs than tennis balls are there?

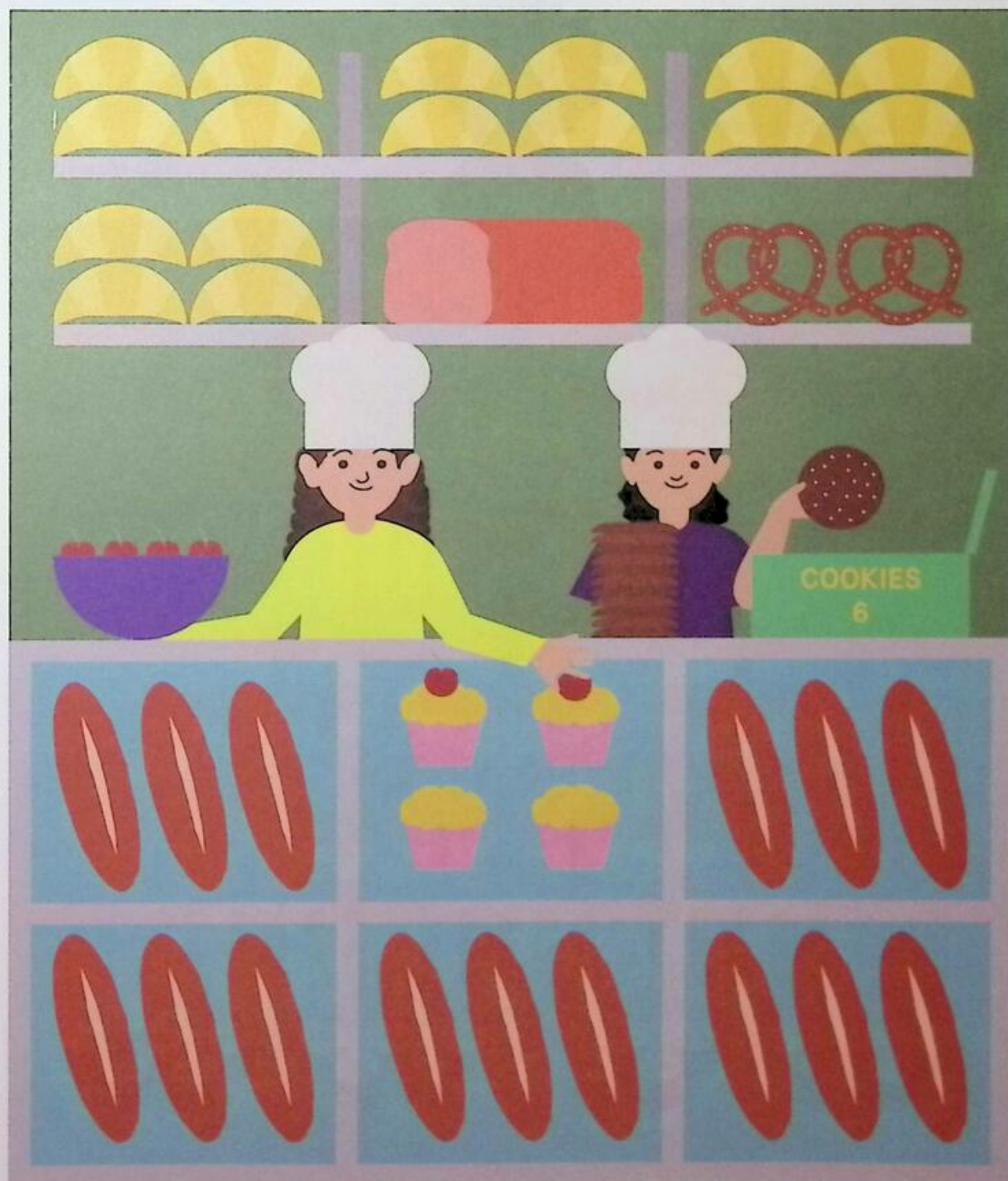


- 10 8 frogs are in the water.
4 more frogs jump in.
Then another 5 frogs jump in.
How many frogs are in the water now?



Chapter 14

Grouping and Sharing



6 (a) $\square + 21 = 26$

(b) $20 - \square = 15$

(c) $15 + \square = 28$

(d) $\square = 33 - 7$

(e) $18 + 8 = 20 + \square$

(f) $24 + 7 = \square + 11$

(g) $23 - 6 = 14 + \square$

(h) $23 - 8 = \square + 3$

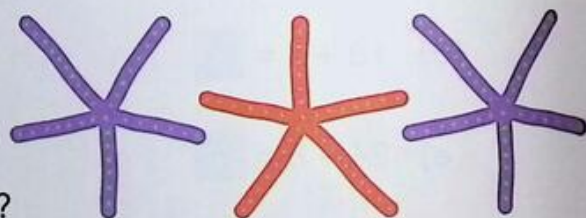
7 (a) $6 + 4 + 9 = \square$

(b) $8 + 7 + 2 = \square$

(c) $4 + 4 + 4 = \square$

(d) $5 + 1 + 6 = 1 + 6 + \square$

- 8 There are 34 starfish.
8 starfish are purple.
The rest are orange.
How many orange starfish are there?



- 9 There are 17 tennis balls and 9 baseballs in the gym.
(a) How many balls are there in all?
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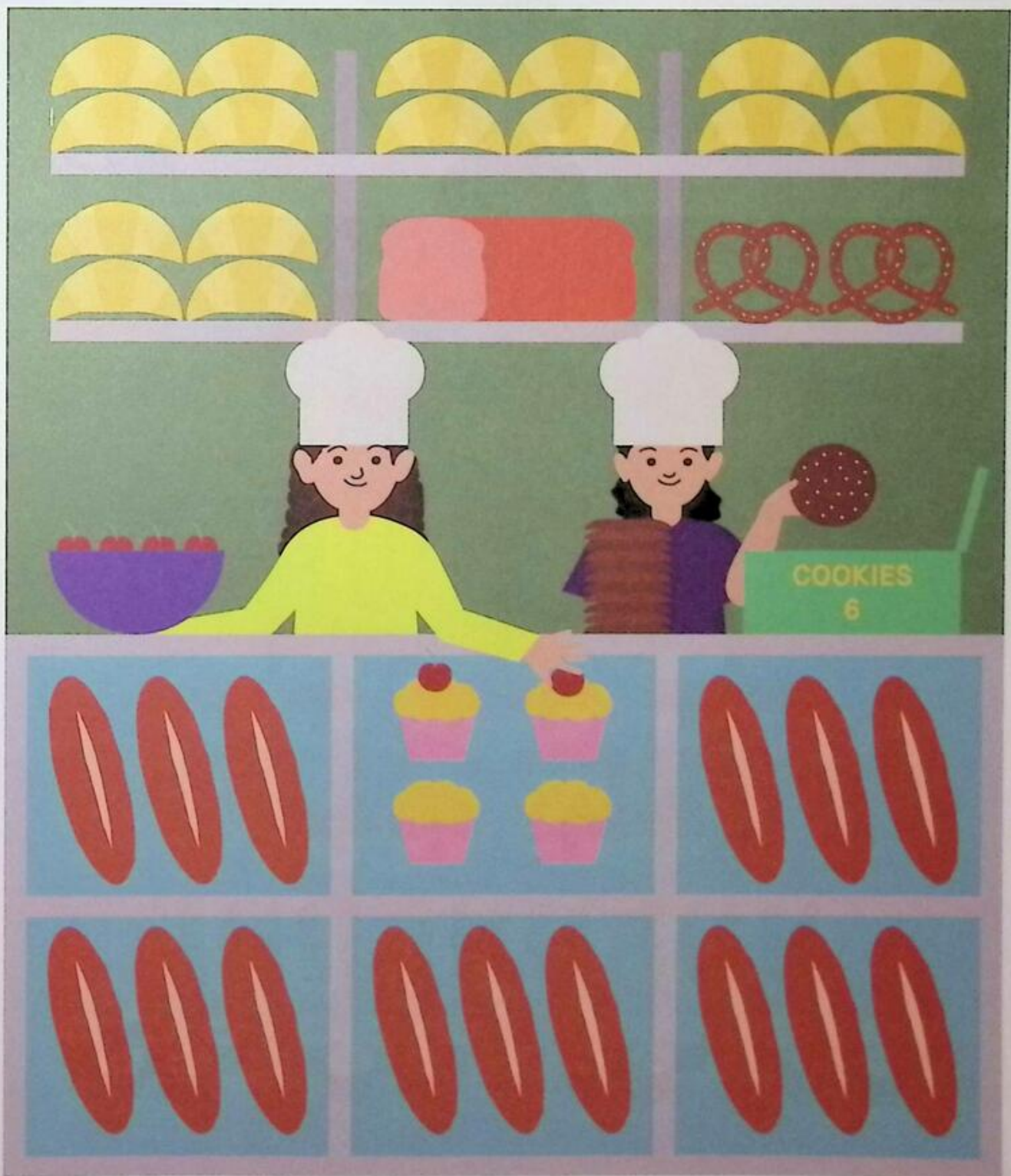


- 10 8 frogs are in the water.
4 more frogs jump in.
Then another 5 frogs jump in.
How many frogs are in the water now?



Chapter 14

Grouping and Sharing



Lesson 1

Adding Equal Groups

1

Think

How many of each kind of food are there?



Learn

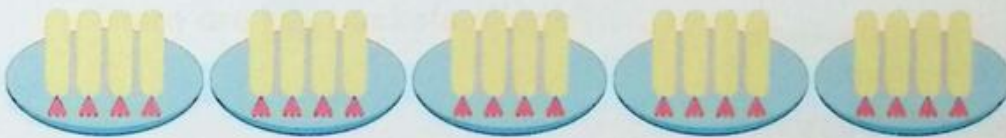


There are 2 dumplings
in each group.
There are 4 groups.

$$2 + 2 + 2 + 2 = \square$$

4 twos is $\square$.

There are $\square$ dumplings altogether.

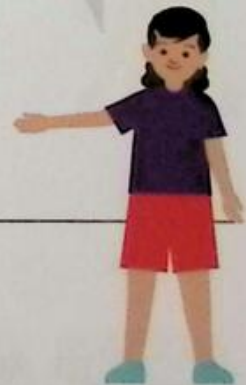


$$4 + 4 + 4 + 4 + 4 = \square$$

There are 5 groups of 4 shrimp tempura.

$\square$ fours is $\square$.

There are $\square$ shrimp tempura altogether.



There are $\square$ groups of $\square$ salmon sushi.

$$\square + \square + \square + \square + \square = \square$$

$\square$ threes is $\square$.

There are $\square$ pieces of salmon sushi altogether.



There are edamame in equal groups.

$$\square + \square + \square = \square$$

fives is .

There are edamame total.

How can we make 4 equal groups of avocado roll pieces?

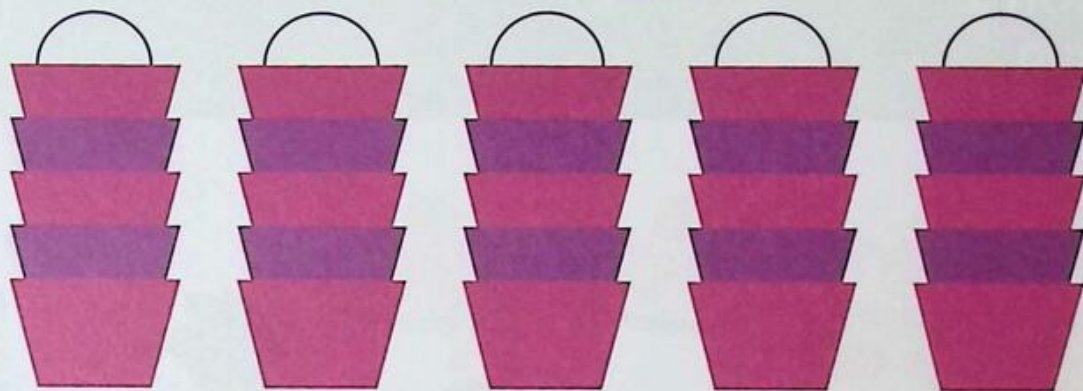


fives is .

There are avocado roll pieces total.

Do

1



There are buckets in stacks.

$$\square + \square + \square + \square + \square = \square$$

There are buckets altogether.

2 (a) Use counters to show 6 groups of 2.

$$2 + 2 + 2 + 2 + 2 + 2 = \square$$

6 twos is .

(b) Use counters to show 2 groups of 6.

$$6 + 6 = \square$$

2 sixes is .

3 (a) $8 + 8 = \square$

(b) $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = \square$

(c) $3 + 3 + 3 + 3 = \square$

(d) $4 + 4 + 4 = \square$

(e) $4 + 4 + 4 + 4 = \square$

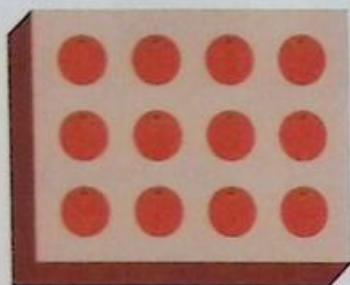
(f) $10 + 10 + 10 + 10 = \square$

Lesson 2

Sharing

2

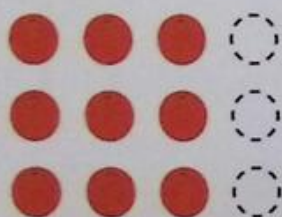
Think



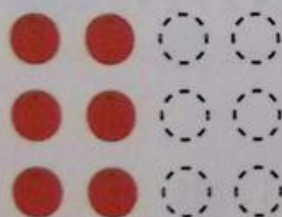
There are 12 mandarin oranges.
3 children share them equally.
How many mandarin oranges will each child get?

Learn

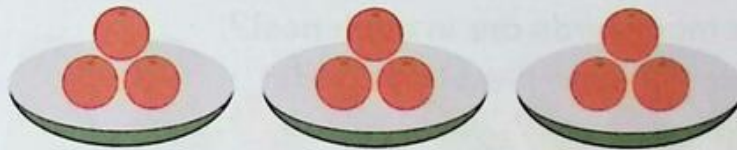
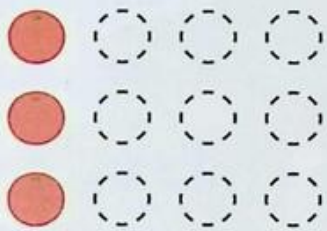
If each child gets 1 mandarin orange ...



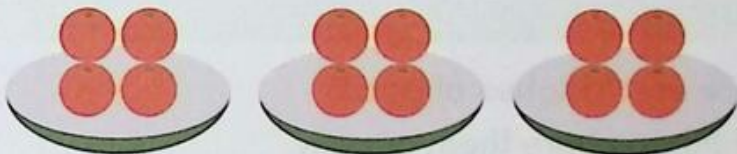
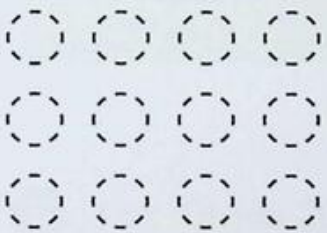
If each child gets 2 mandarin oranges ...



If each child gets 3 mandarin oranges ...



If each child gets 4 mandarin oranges ...



There are no more mandarin oranges to share.

Each child gets 3 mandarin oranges.

- (a) Divide 12 mandarin oranges equally among 4 children.
How many mandarin oranges does each child get?
- (b) Divide 12 mandarin oranges equally among 2 children.
How many mandarin oranges does each child get?
- (c) Divide 12 mandarin oranges equally among 6 children.
How many mandarin oranges does each child get?
- (d) What happens if we try to divide 12 mandarin oranges
equally among 5 children?

Do

- 1 Divide 15 birds equally into 3 nests.
How many birds are in each nest?



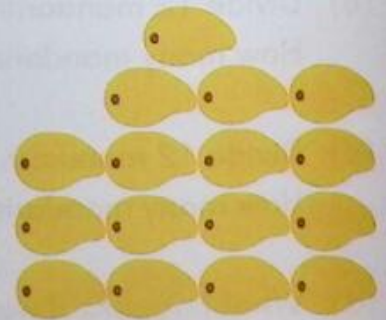
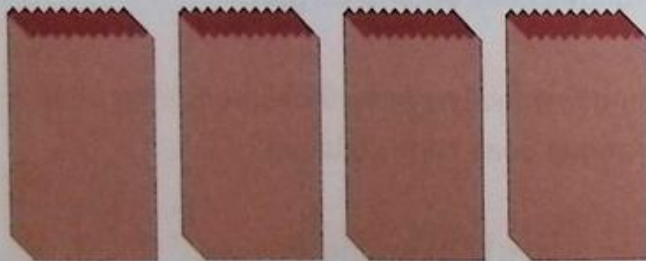
There are birds in each nest.

- 2 There are 14 tubes of paint.
2 children share them equally.
How many tubes of paint will each child have?



Each child has tubes of paint.

- 3 Divide 16 mangoes equally into 4 bags.
How many mangoes will be in each bag?



There will be mangoes in each bag.

- 4 There are 5 pumpkins and 5 children.
How many pumpkins will each child have, if they share them equally?

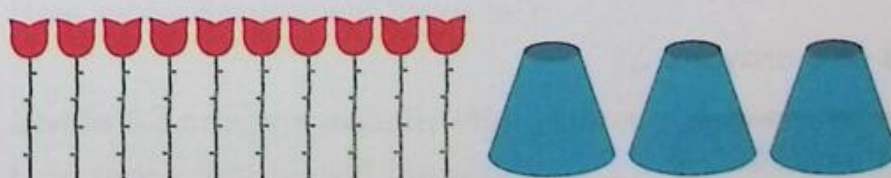


- 5 (a) Divide 20 into 4 equal groups.
There are in each group.

- (b) Divide 18 into 2 equal groups.
There are in each group.

- (c) Divide 14 into 7 equal groups.
There are in each group.

- 6 Divide 10 roses equally into 3 vases.



There will be roses in each vase.

There will be rose left over.

I cannot divide the
10 roses equally.

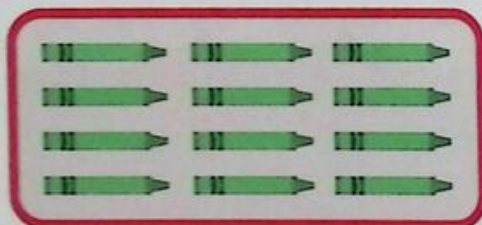


Lesson 3

Grouping

3

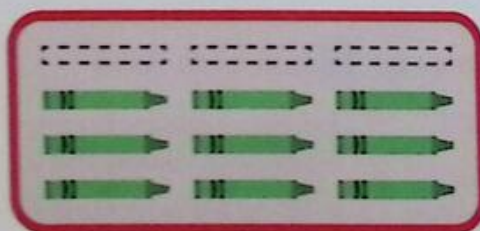
Think



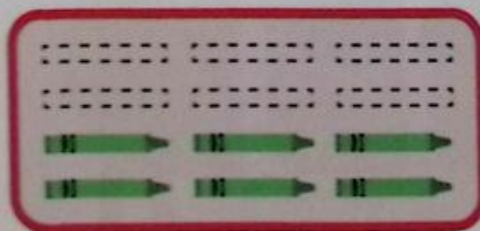
There are 12 crayons on the tray.
We want to put 3 crayons in each group.
How many groups will we make?

Learn

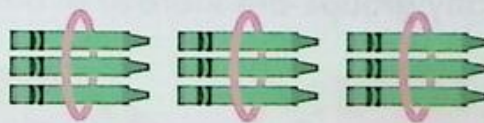
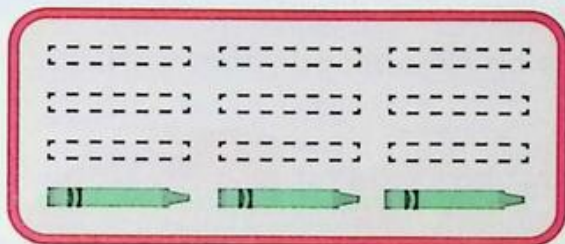
If we make 1 group of 3 crayons ...



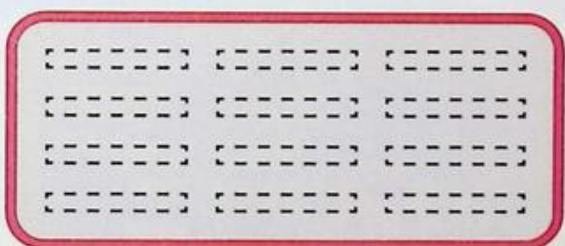
If we make 2 groups of 3 crayons ...



If we make 3 groups of 3 crayons ...



If we make 4 groups of 3 crayons ...



There are no crayons left.

We need  rubber bands.

- (a) Divide 12 crayons equally into groups of 4 crayons.
How many groups will there be?
- (b) Divide 12 crayons equally into groups of 2 crayons.
How many groups will there be?
- (c) Divide 12 crayons equally into groups of 6 crayons.
How many groups will there be?

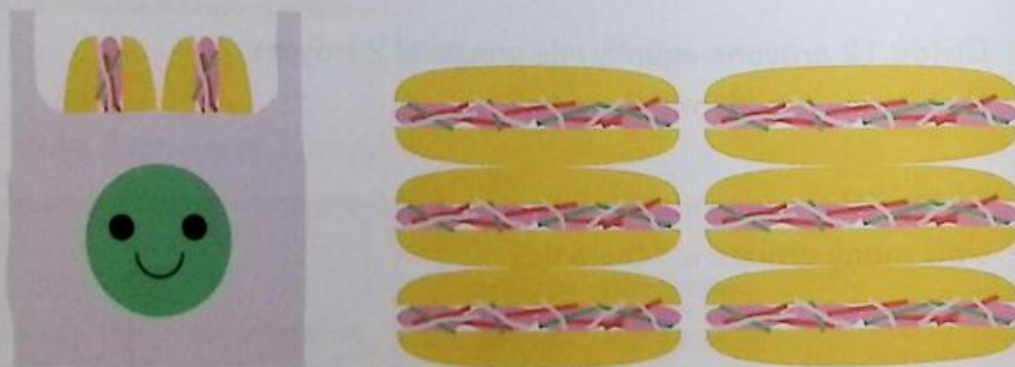
Do

- 1** Divide 15 puppies into groups of 3 for bedtime.
How many groups are there?



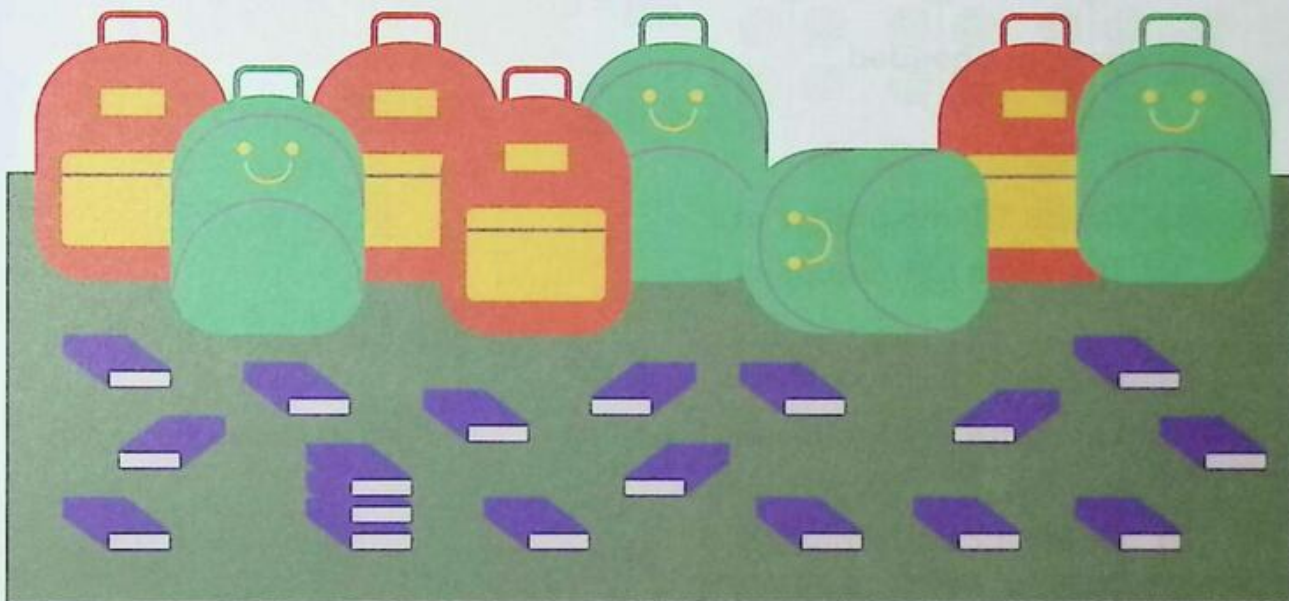
There are groups of 3 puppies.

- 2** There are 8 sandwiches.
Each bag can hold two sandwiches.
How many bags do we need to hold all the sandwiches?



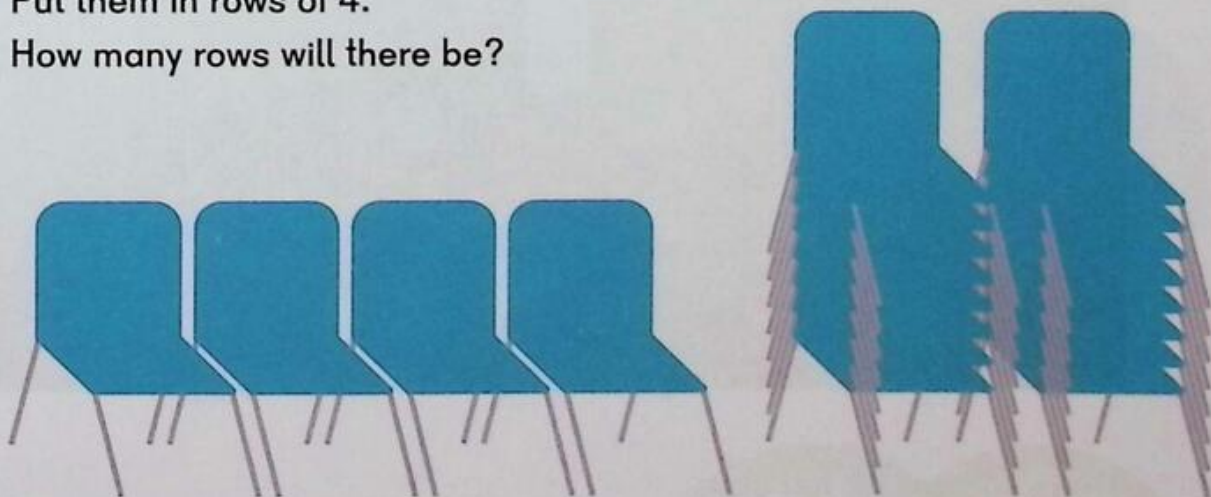
We need bags.

- ③ There are 18 books.
Each backpack will carry 3 books.
How many backpacks do we need to carry all the books?



We need backpacks.

- ④ There are 20 chairs.
Put them in rows of 4.
How many rows will there be?



There will be rows of 4 chairs.

- 5 There are 16 scissors.
Each case holds 4 scissors.
How many cases are needed?

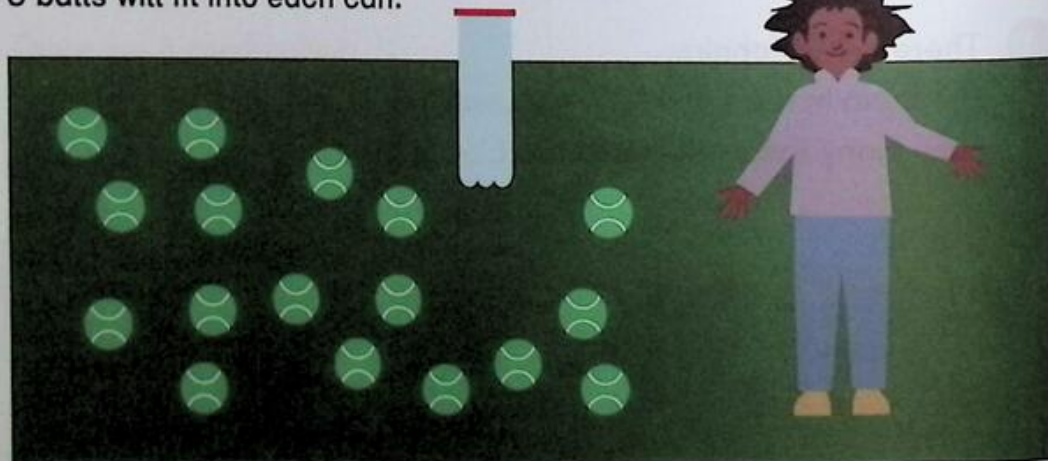
cases are needed.



- 6 (a) Divide 16 into groups of 2.
There are groups of 2.
- (b) Divide 9 into groups of 3.
There are groups of 3.
- (c) Divide 12 into groups of 6.
There are groups of 6.

- 7 There are 17 balls.
3 balls will fit into each can.

There are some balls left over.



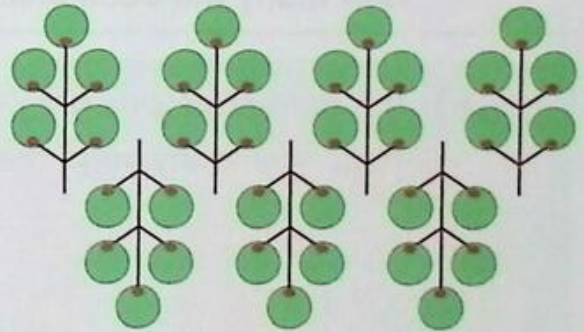
There will be full cans.

There will be balls left over.

1 (a) $5 + 5 + 5 + 5 + 5 + 5 + 5 = \square$

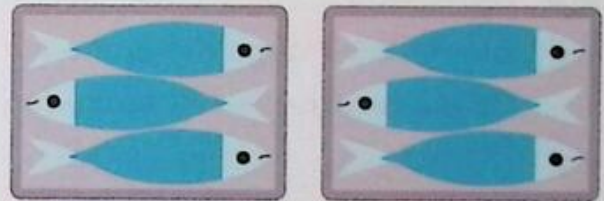
There are $\square$ groups of $\square$.

7 fives is $\square$.



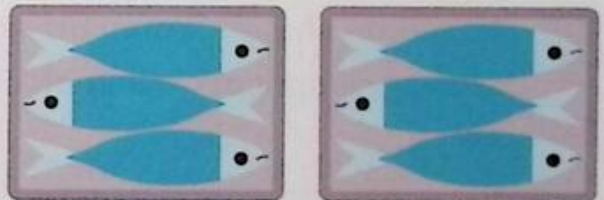
(b) $3 + 3 + 3 + 3 = \square$

4 threes is $\square$.



(c) $7 + 7 = \square$

2 sevens is $\square$.



(d) 6 fours is $\square$.

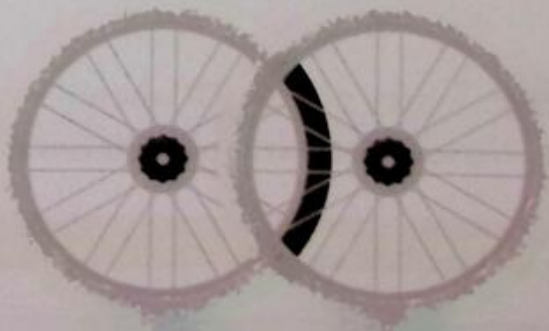
- 2 There are 5 bags of cauliflower.
Each bag has 4 pieces of cauliflower.
How many pieces of cauliflower
are there altogether?

$4 + 4 + 4 + 4 + 4 = \square$

There are $\square$ pieces of cauliflower altogether.



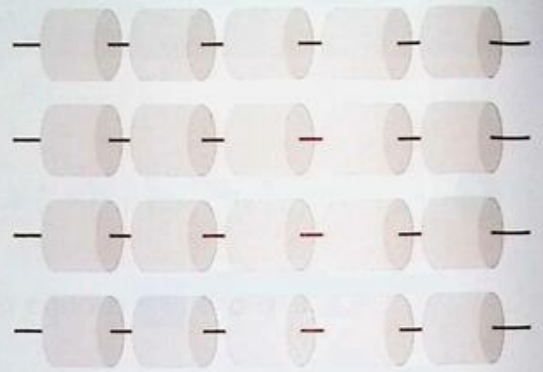
- 3 A bike has 2 wheels.
How many wheels are on 10 bikes?



- 4 There are 20 marshmallows.

(a) If 4 children share them equally,
how many will each child get?

(b) If 5 marshmallows are put in each
bag, how many bags are needed?

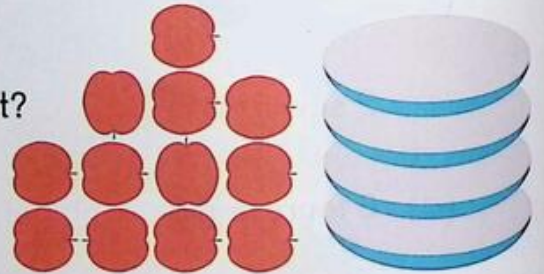


- 5 Hazel has 8 dog treats.

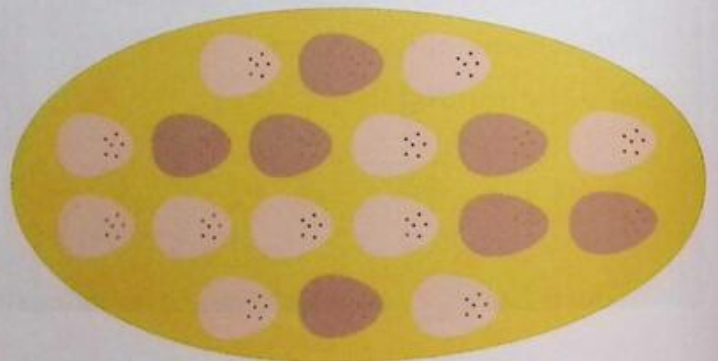
She gives 2 dogs the same number of treats.
How many treats will each dog get?



- 6 4 children share 12 apricots equally.
How many apricots will each child get?



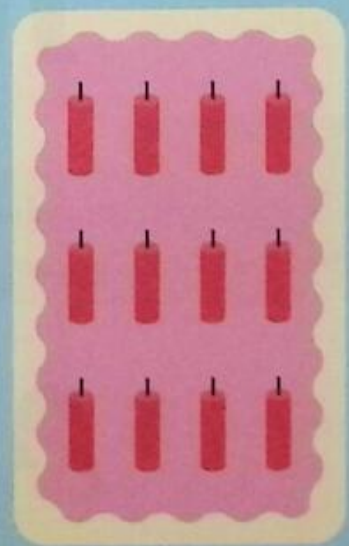
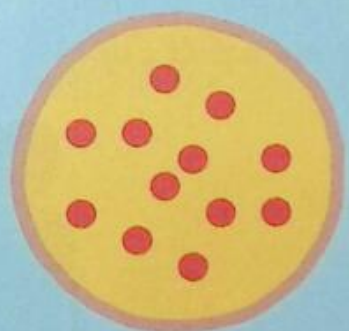
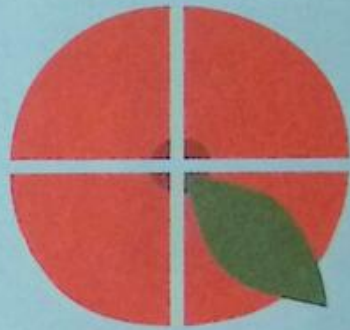
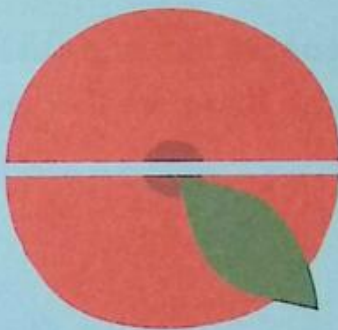
- 7 There are 18 eggs.
Each carton holds 6 eggs.
How many egg cartons are needed?



- 8 Tomas counts 20 wheels on some bikes.
How many bikes are there?

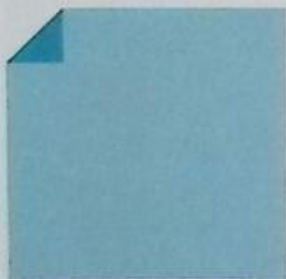
Chapter 15

Fractions



How can we cut the cake into 2 or 4 equal parts?

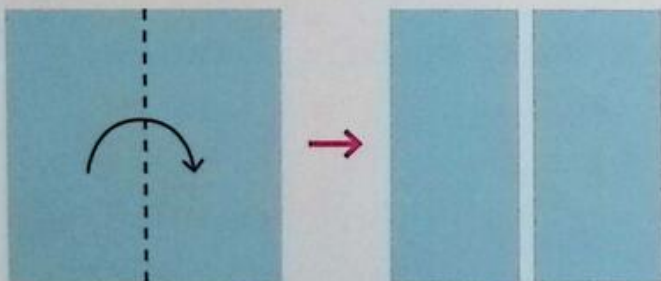
Think



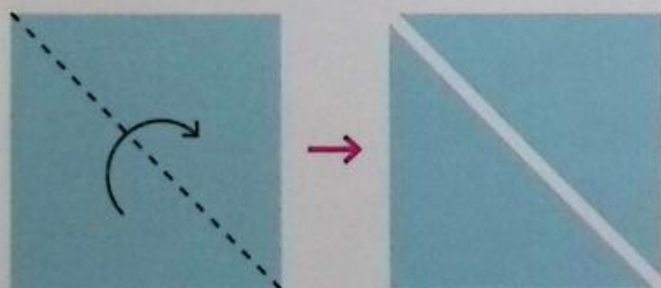
How can we fold and cut the square paper so there are 2 equal parts?

Learn

Fold the paper to make halves.



Each part is 1 **half** of the whole paper.

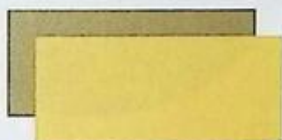


Each of these parts is also 1 **half** of the whole paper.



Do

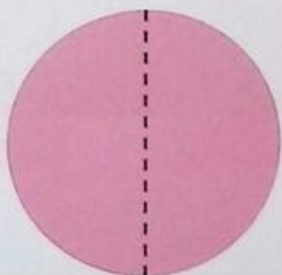
- 1 (a) Fold and cut a strip of paper into halves.



Check if each part is the same size.



- (b) Fold and cut a circle into halves.



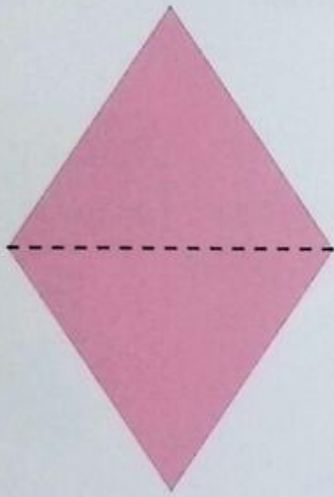
Each part is a **half circle**.



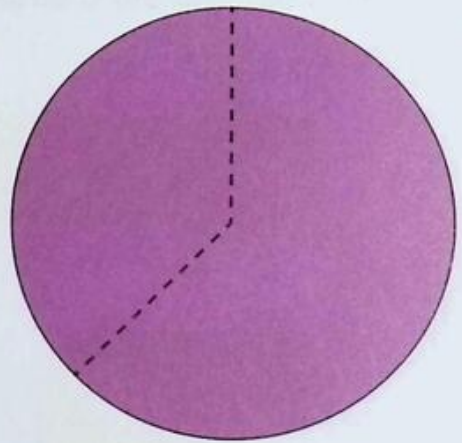
- (c)  halves make 1 whole.

2 Which pictures show halves?

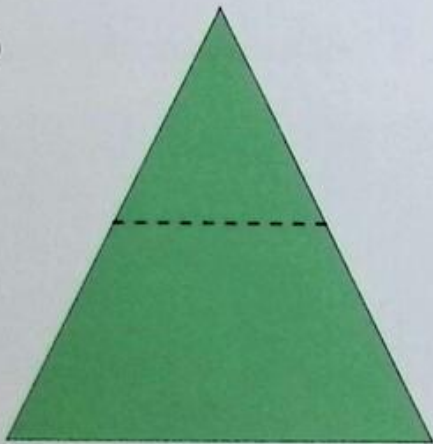
(a)



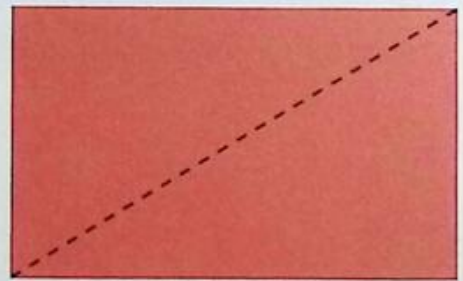
(b)



(c)



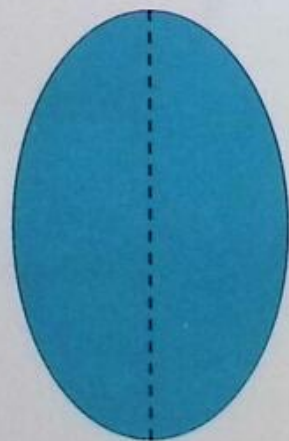
(d)



(e)



(f)



Lesson 2

Fourths

2

Think

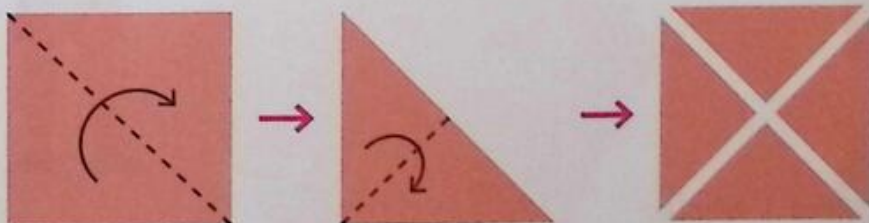
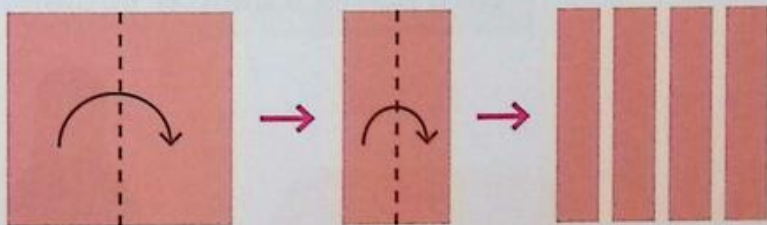
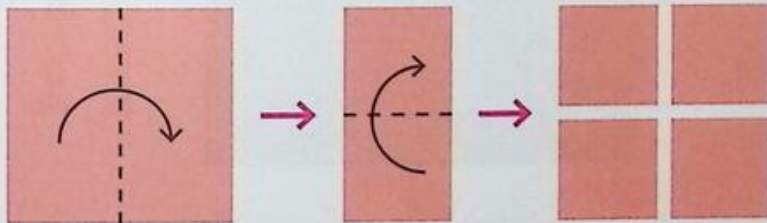


How can we fold and cut the square paper so there are 4 equal parts?

Learn

Fold and cut the paper to make **fourths**.

Each part is 1 **fourth** of the whole paper.



Do

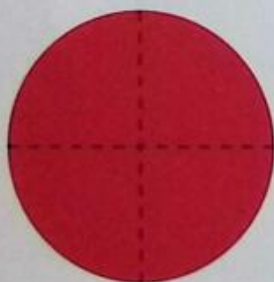
- 1 (a) Fold and cut a strip of paper into fourths.



Check if each part is the same size.



- (b) Fold and cut a circle into fourths.



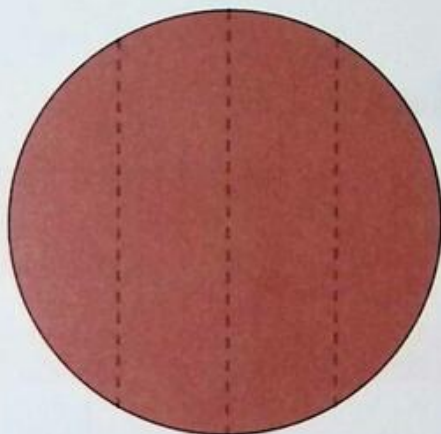
Each part is a **quarter circle**.



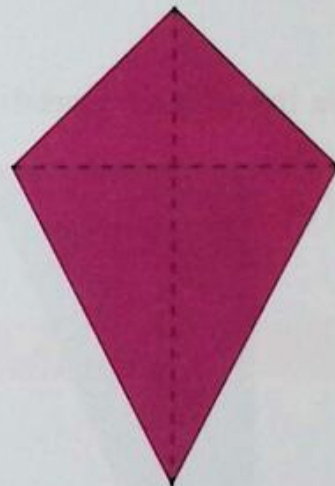
 quarters make 1 whole.

2 Which pictures show fourths?

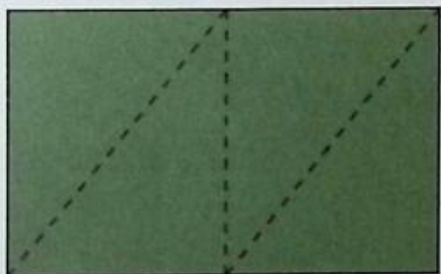
(a)



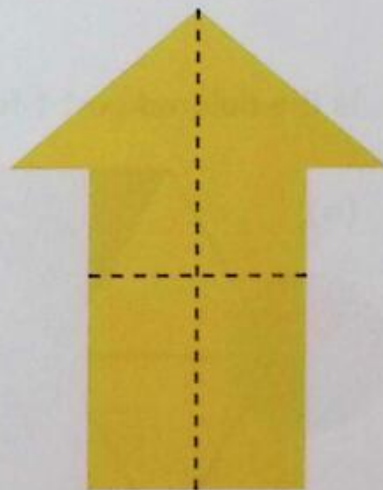
(b)



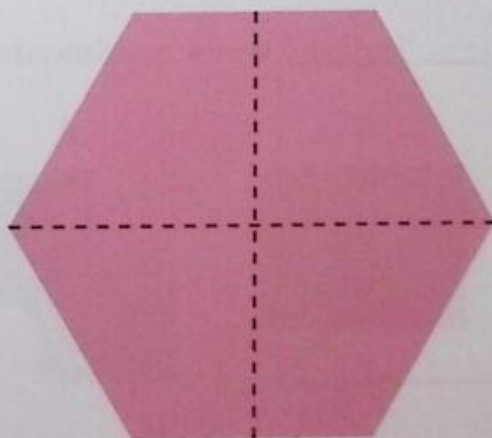
(c)



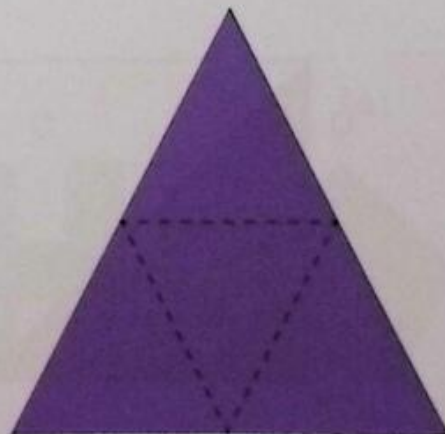
(d)



(e)

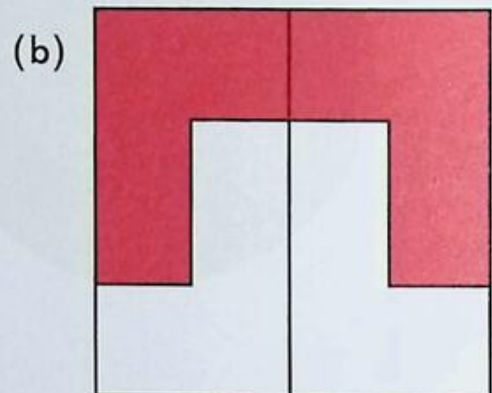
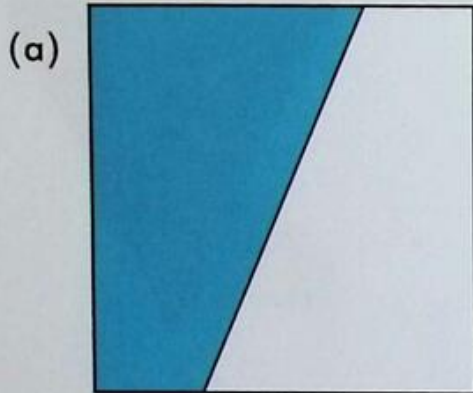


(f)

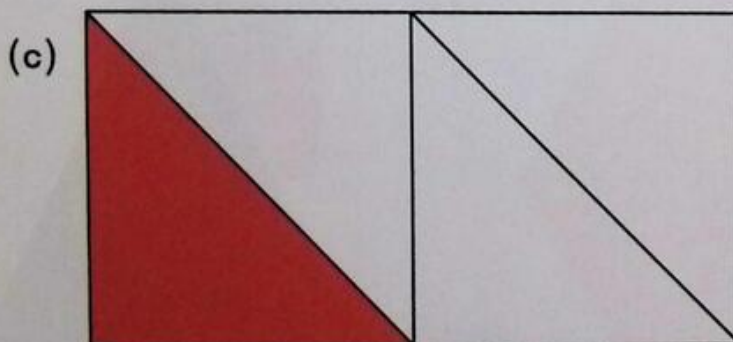
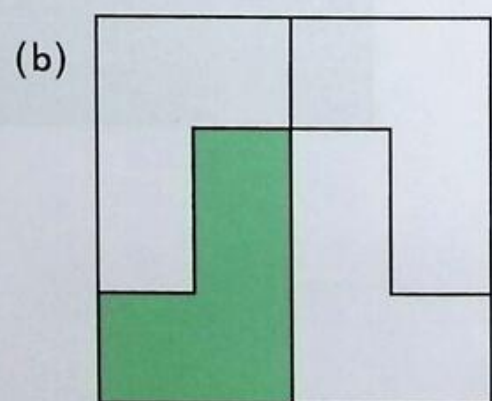
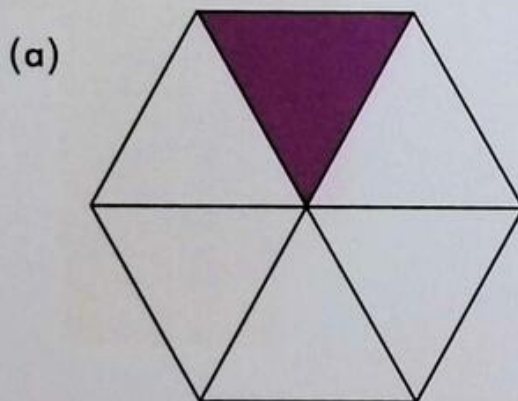


3  fourths make 1 half.

4 Is the colored part 1 half of the whole?

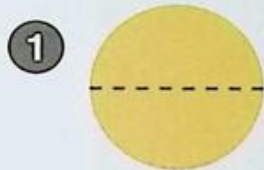


5 Is the colored part 1 fourth of the whole?



Lesson 3 Practice

3



(a) Each part is half of the whole circle.

(b) There are halves in a whole.



(a) Each part is fourth of the whole bar.

(b) There are fourths in a whole.

③ Which pictures show halves?

A



B



C

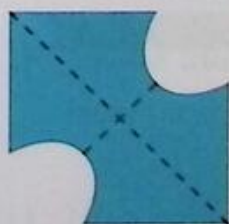


D



④ Which pictures show fourths?

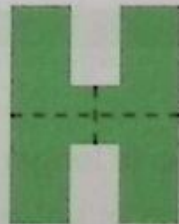
A



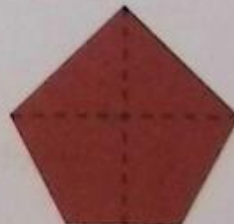
B



C



D



1 (a) $30 + \square = 37$

(b) $29 - \square = 9$

(c) $24 + 3 = \square$

(d) $18 + 7 = \square$

(e) $39 - 5 = \square$

(f) $35 - 9 = \square$

(g) $7 + 9 + 3 = \square$

(h) $16 + 8 + 2 = \square$

(i) $5 + 5 + 5 + 5 + 5 = \square$

(j) $3 + 3 + 3 + 3 + 3 + 3 = \square$

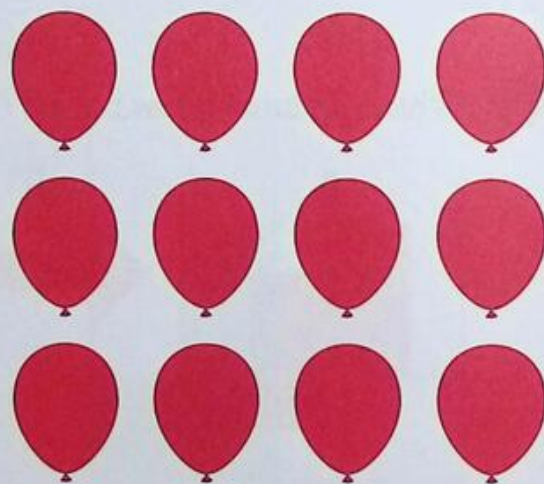
2 Which statement is false?

(a) There are 4 groups of 3.

(b) There are 3 groups of 4.

(c) There are 2 groups of 8.

(d) There are 6 groups of 2.



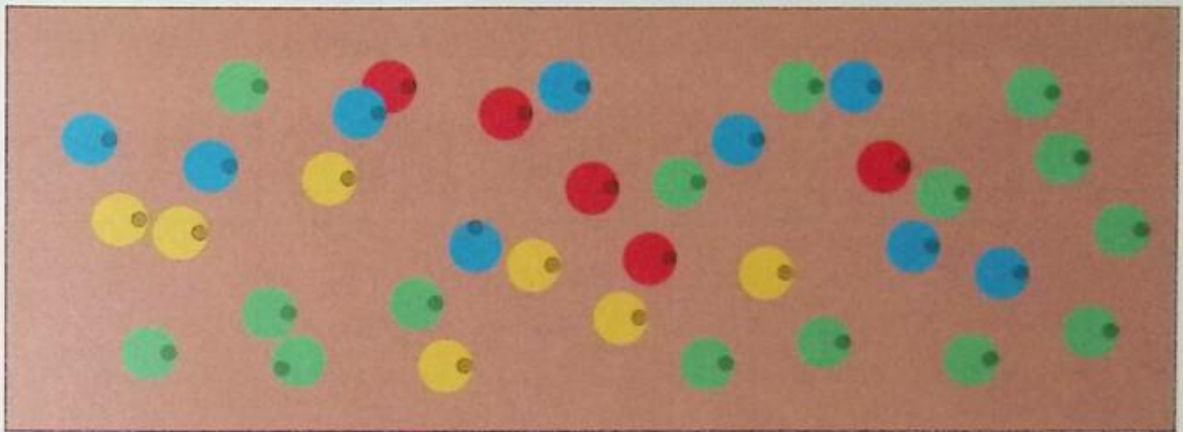
3



(a) Which ribbon is longer?

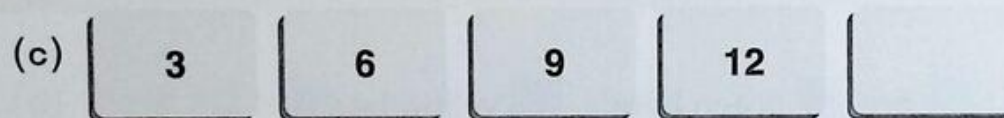
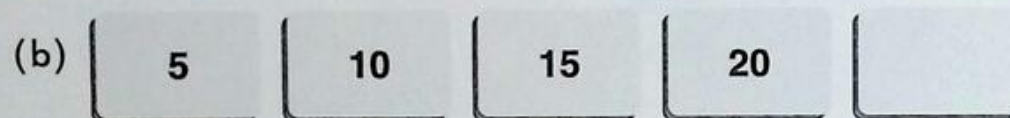
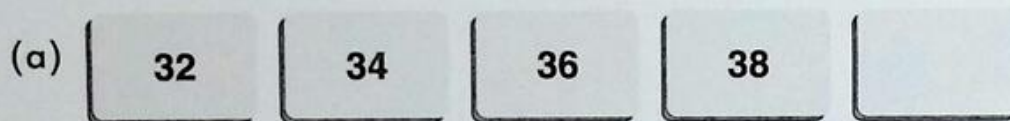
(b) How many units longer?

4

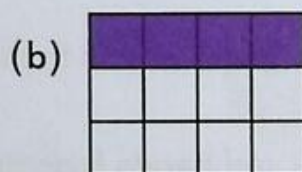


- (a) There are green beads, yellow beads, red beads, and blue beads.
- (b) Write the number of each color bead in words.
- (c) There are more green beads than yellow beads.
- (d) There are fewer red beads than green beads.
- (e) How many green beads and blue beads are there altogether?
- (f) How many beads are there in all?
- (g) Write the total number of beads in words.
- (h) If a string holds 9 beads, how many strings are needed?
(Use counters to find the answer.)
- (i) Divide the beads equally among 6 strings.
How many beads are on each string?
- (j) How many more blue beads are needed to have the same number as green beads?

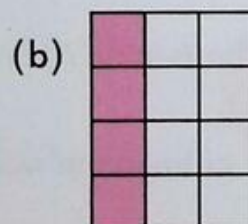
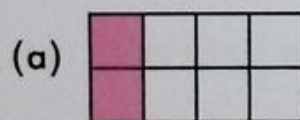
5 What comes next?



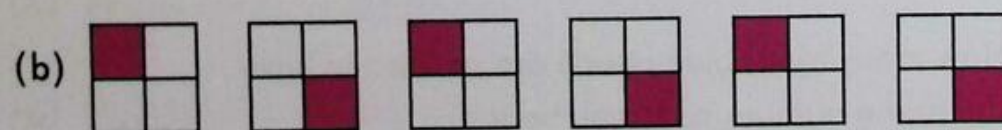
6 Is the colored part 1 half of the whole?



7 Is the colored part 1 fourth of the whole?



8 What comes next?



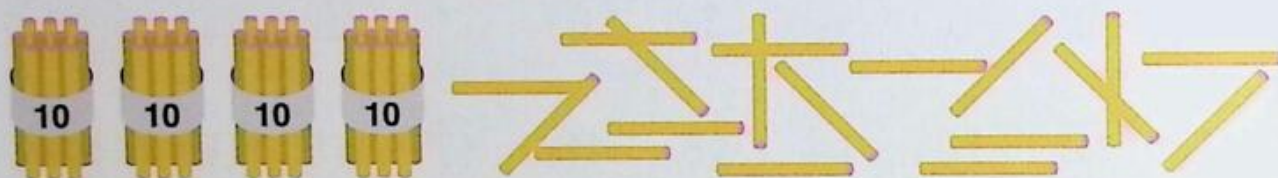
Chapter 16

Numbers to 100

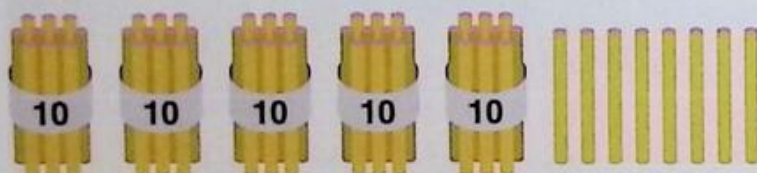
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



What patterns do you notice in this number chart?

Think

How many straws are there?

Learn

50 and 8 make .

58 is 50 and .

$50 + 8 =$.

There are straws.

Ten, twenty, thirty, forty,
fifty, fifty-one, fifty-two ...



50 → 58
8

fifty-eight

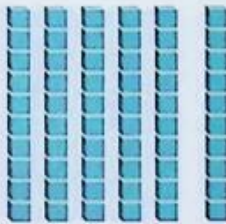
Do

① How many  are there?



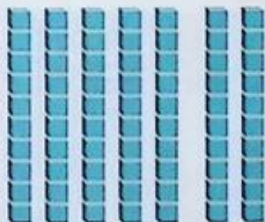
50
fifty

50 =  tens



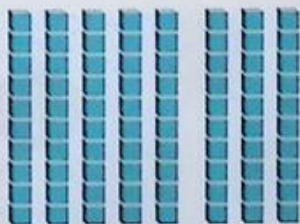
60
sixty

 = 6 tens



70
seventy

7 tens = 



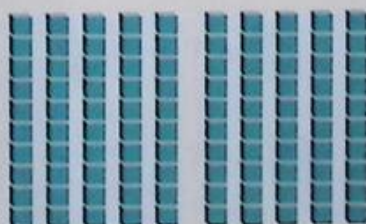
80
eighty

8 tens =  ones



90
ninety

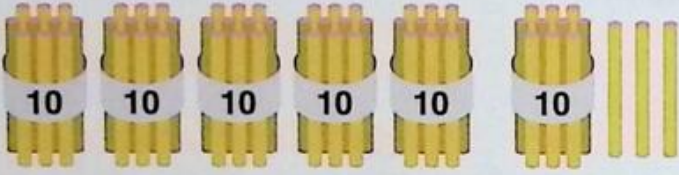
90 ones =  tens



100
one hundred

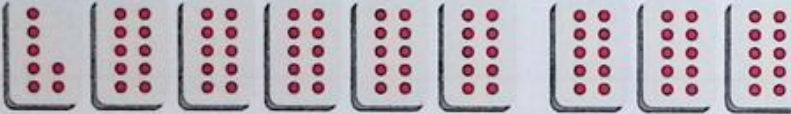
100 =  tens

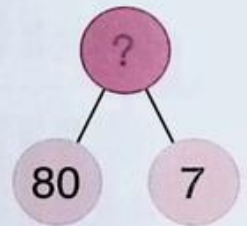
2 How many are there?

(a)   sixty-three

3 more than 60 is .

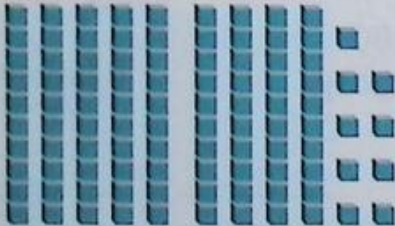
$60 + 3 = \text{}$.

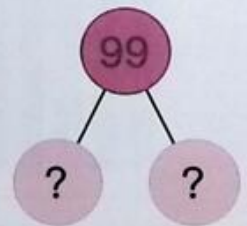
(b) 



80 more than 7 is .

$7 + 80 = \text{}$.

(c) 



99 is and 9.

$99 = \text{} + 9$.

99 and what make 100?



3 Show the numbers with place-value cards.

(a) 59 

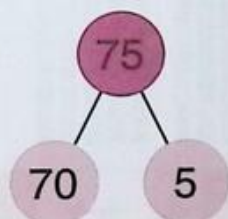
(b) 95

(c) 80

(d) 77

(e) 91

4 (a)



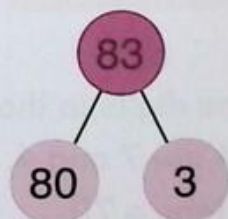
$70 + 5 = \square$

$75 - 5 = \square$

$5 + 70 = \square$

$75 - 70 = \square$

(b)



$\square + 3 = 83$

$83 - \square = 80$

$\square + 80 = 83$

$\square - 80 = 3$

5

(a) $90 + 5 = \square$

(b) $\square + 9 = 59$

(c) $\square = 6 + 80$

(d) $68 = 60 + \square$

(e) $97 - 7 = \square$

(f) $79 - \square = 70$

(g) $77 - 70 = \square$

(h) $50 = \square - 9$

Think

How many pens are there?

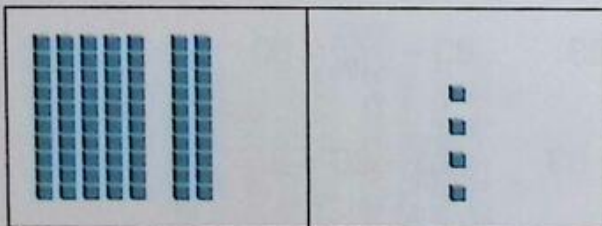


How many bags of 10 are there?

How many loose pens are there?

Learn

Show the number on a place-value chart.



Tens	Ones
7	4

7 tens and 4 ones make .

There are pens.

$$\begin{array}{|c|c|} \hline 7 & 4 \\ \hline \end{array} \rightarrow \begin{array}{|c|c|} \hline 7 & 0 \\ \hline \end{array} \begin{array}{|c|} \hline 4 \\ \hline \end{array}$$

The digits in the number 74 are 7 and 4.

7 tens = 70

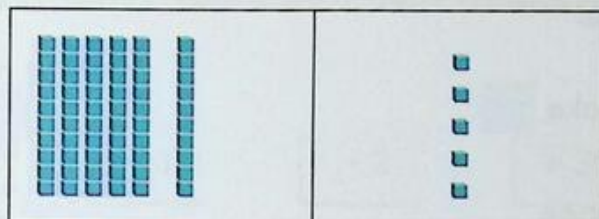
4 ones = 4

What number is 6 tens and 14 ones?



Do

1 (a)



Tens	Ones
6	5

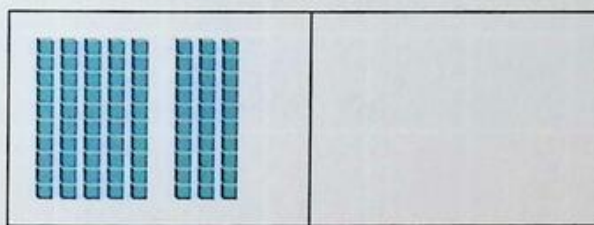
6 tens and 5 ones is .

6 tens =

5 ones =

$60 + 5 =$

(b)



Tens	Ones
8	0

80 is tens and ones.

8 tens =

0 ones =

= $80 + 0$

2 Show the numbers on a place-value chart.

(a) 60

(b) 98

(c) 53

(d) 77

3 (a) 81 is tens and one.

(b) 9 tens and 7 ones make .

(c) is 6 tens and 6 ones.

(d) 1 one and 8 tens make .

(e) There are tens in 80.

4 (a) $70 + 6 =$

(b) $93 =$ $+ 3$

(c) $= 60 + 6$

(d) $80 +$ $= 89$

(e) $55 - 5 =$

(f) $61 - 60 =$

(g) $79 -$ $= 70$

(h) $- 8 = 80$

5 (a) 95 is 9 tens and ones.

(b) 95 is 8 tens and ones.

(c) 95 is 7 tens and ones.

(d) 95 is 6 tens and ones.

I wonder what
number is 11 tens?

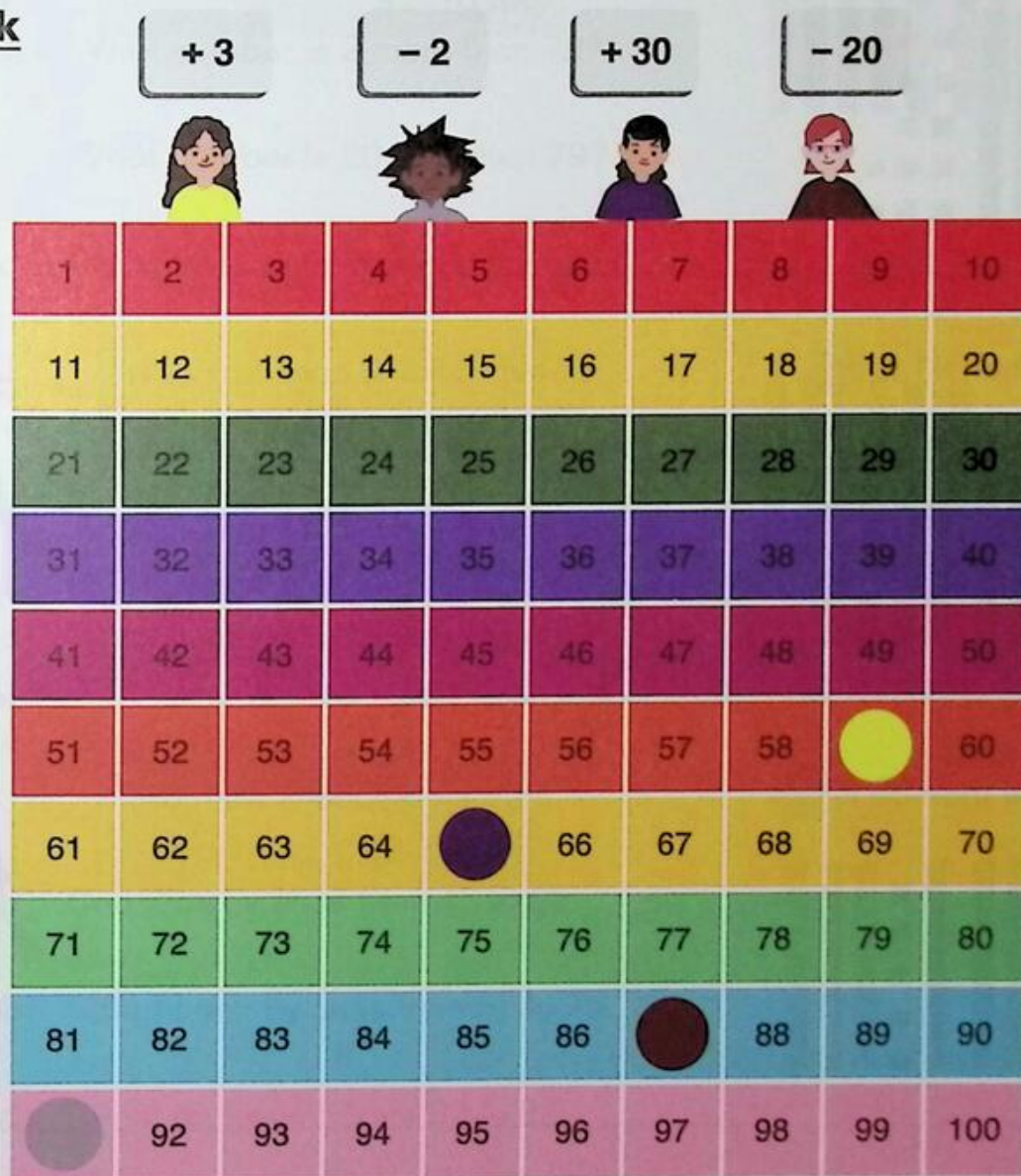


Lesson 3

Count by Ones or Tens

3

Think



Sofia, Dion, Mei, and Emma are playing a number game.

Sofia  moves forward 3. Where will she be?

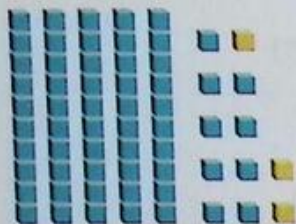
Dion  moves backward 2. Where will he be?

Mei  moves forward 30. Where will she be?

Emma  moves backward 20. Where will she be?

Learn

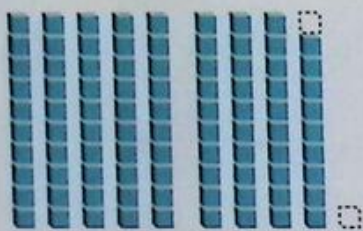
3 more than 59 is .



Count on 3 ones from 59:
60, 61, 62



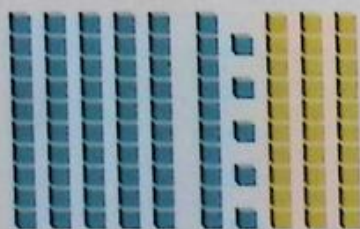
2 less than 91 is .



Count back 2 ones from 91:
90, 89



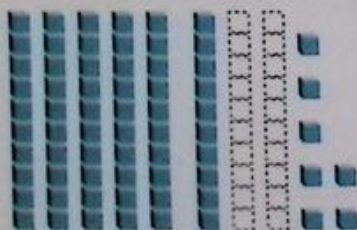
30 more than 65 is .



Count on 3 tens from 65:
75, 85, 95



20 less than 87 is .

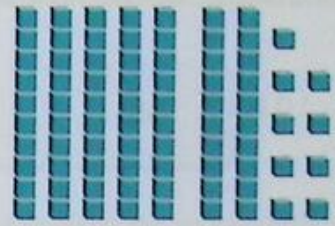


Count back 2 tens from 87:
77, 67



Do

- ① (a) What number is 2 less than 79?
- (b) What number is 2 more than 79?
- (c) What number is 20 less than 79?
- (d) What number is 20 more than 79?



- ② (a) What number is 3 less than 62?
- (b) What number is 3 more than 62?
- (c) What number is 30 less than 62?
- (d) What number is 30 more than 62?
- ③ (a) Count on by ones from 47 to 52.
- (b) Count back by ones from 87 to 75.
- (c) Count on by tens from 32 to 82.
- (d) Count back by tens from 77 to 27.



4 Complete the number patterns.

(a)

66	67		69		71
----	----	--	----	--	----

(b)

75	73	71			65
----	----	----	--	--	----

(c)

99	89		69		
----	----	--	----	--	--

(d)

6		46	66	
---	--	----	----	--

(e)

	38	58		98
--	----	----	--	----

5 (a) $48 + 3 =$

(b) $79 - 10 =$

(c) $51 - 2 =$

(d) $88 - 20 =$

(e) $3 + 92 =$

(f) $70 + 30 =$

(g) $3 + 68 =$

(h) $100 - 10 =$

Lesson 4

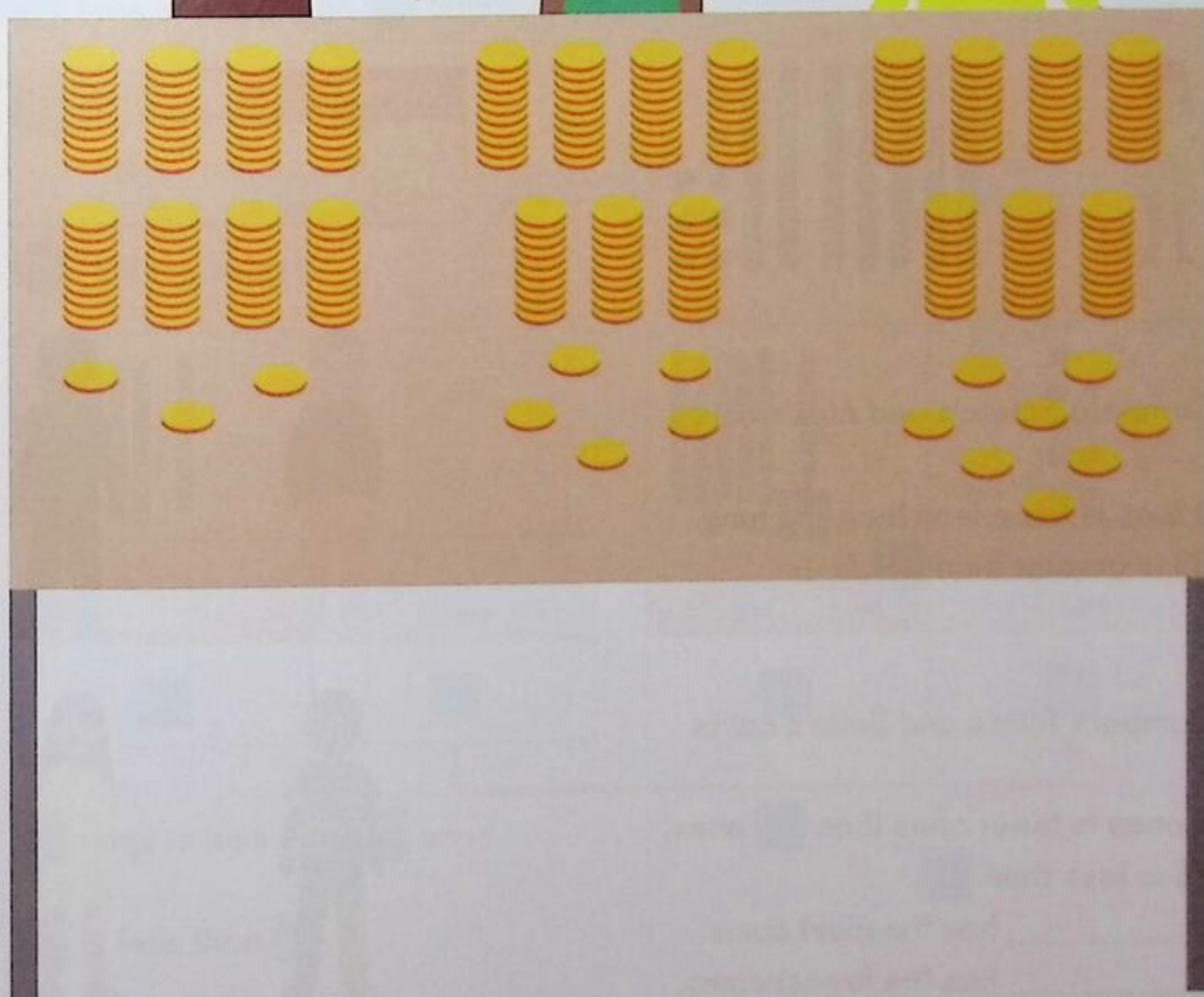
Compare Numbers to 100

4

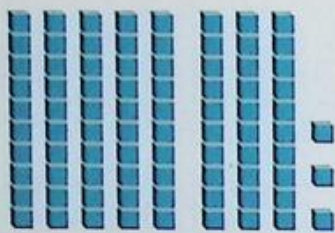
Think

Who has the most coins?

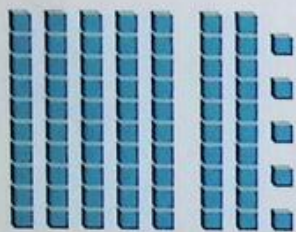
Who has the fewest coins?



Learn



Tens	Ones
8	3



Tens	Ones
7	5



Tens	Ones
7	8

Compare Emma's and Alex's coins.

8 tens is more tens than tens.

83 is greater than .



Compare Alex's and Sofia's coins.

5 ones is fewer ones than ones.

75 is less than .

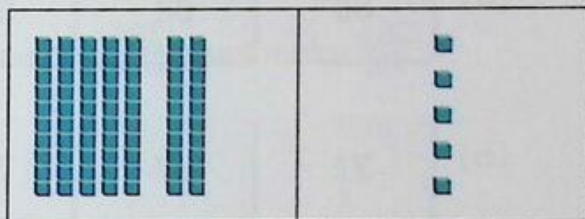
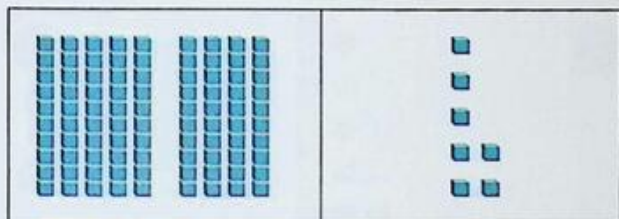
has the most coins.

has the fewest coins.



Do

① Which is greater?



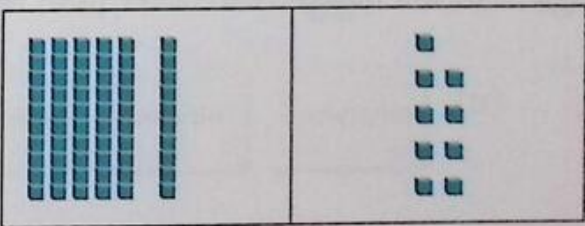
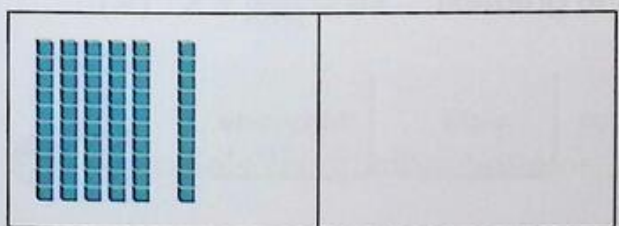
Tens	Ones

Tens	Ones

tens is more than tens.

is greater than .

② Which is less?



Tens	Ones

Tens	Ones

ones is less than ones.

is less than .

3 Put the numbers in order from least to greatest.

(a)

85

82

90

(b)

77

97

79

4 Put the numbers in order from greatest to least.

(a)

37

96

43

77

19

44

(b)

85

57

50

75

38

58

5 Put the numbers in order from least to greatest.

(a)

ninety-two

nineteen

eighty-three

eight

thirty-nine

(b)

seventy

seventy-two

forty-seven

seventy-one

seventeen

(c)

nine tens six ones

fifty-four

five tens nine ones

six tens nine ones

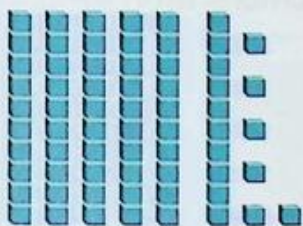
forty-five

Lesson 5

Practice

5

1



tens and ones make .

2

(a) 4 more than 80 is .

(b) 72 is and 2.

(c) 52 ones is tens and ones.

(d) is 6 tens.

3

(a) $5 + 50 =$

(b) $35 - 5 =$

(c) $64 - 60 =$

(d) $30 +$ $= 39$

(e) $2 +$ $= 82$

(f) $80 = 84 -$

4

Complete the number patterns.

(a)

15		35	45	
----	--	----	----	--

(b)

67	69			75
----	----	--	--	----

(c)

	78	58		18
--	----	----	--	----

5 (a) 20 less than 64 is .

(b) 2 less than 64 is .

(c) 3 more than 49 is .

(d) 30 more than 49 is .

6 Greater than or less than?

(a) 50 is _____ than 20.

(b) 88 is _____ than 98.

(c) 69 is _____ than 96.

(d) 65 is _____ than 63.

7 Put in order from least to greatest.

(a)

23

66

19

100

53

(b)

76

35

74

42

56

(c)

48

forty-four

twenty-three

5 tens

29

8 True or false?

(a) 4 tens is the same as 40 ones. (b) 2 less than 77 is 57.

(c) 55 is between 65 and 54. (d) 58 is greater than 7 tens.

(e) 48 ones is less than 4 ones 8 tens.

Chapter 17

Addition and Subtraction Within 100

There are 42 yellow buttons with 2 holes and 5 yellow buttons with 4 holes.

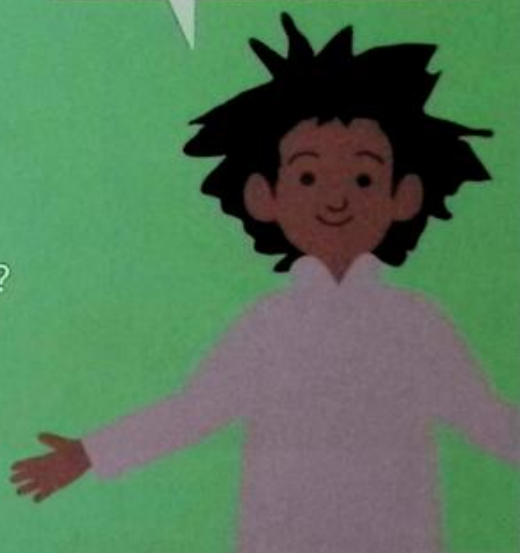
How many yellow buttons are there altogether?

There are 31 square green buttons.

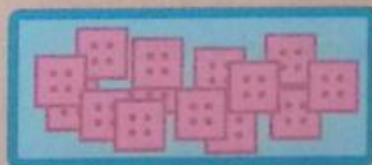
6 of them are used.

How many square green buttons are left?

Make up other addition and subtraction stories.



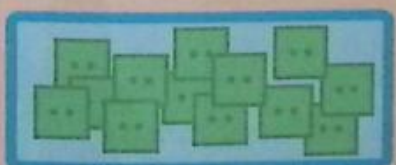
42



38



5



31



20



49

Think



Emma collected 52 seashells in the morning.
She collected 7 more seashells in the afternoon.
How many seashells did she collect in all?

Learn



$$52 + 7 = \square$$

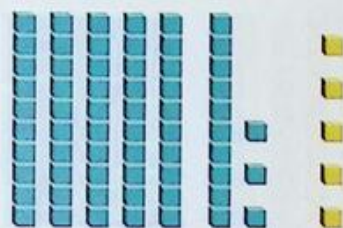
She collected $\square$ seashells in all.

$$\begin{array}{r} 52 + 7 \\ \swarrow \searrow \\ 50 \quad 2 \\ 2 + 7 = 9 \\ 50 \text{ and } 9 \text{ make } \dots \end{array}$$

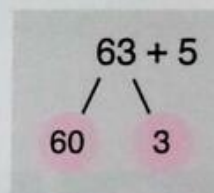


Do

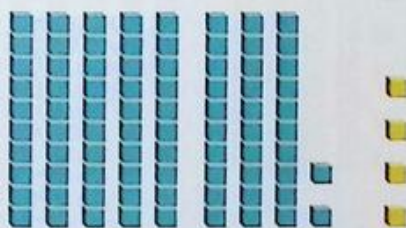
- 1 (a) Add 63 and 5.



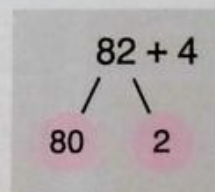
$$63 + 5 = \square$$



- (b) Add 4 and 82.



$$4 + 82 = \square$$



2 (a) $72 + 7 = \square$

(b) $4 + 93 = \square$

(c) $55 + 3 = \square$

(d) $3 + 84 = \square$

(e) $\square = 97 + 2$

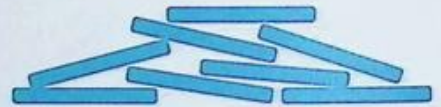
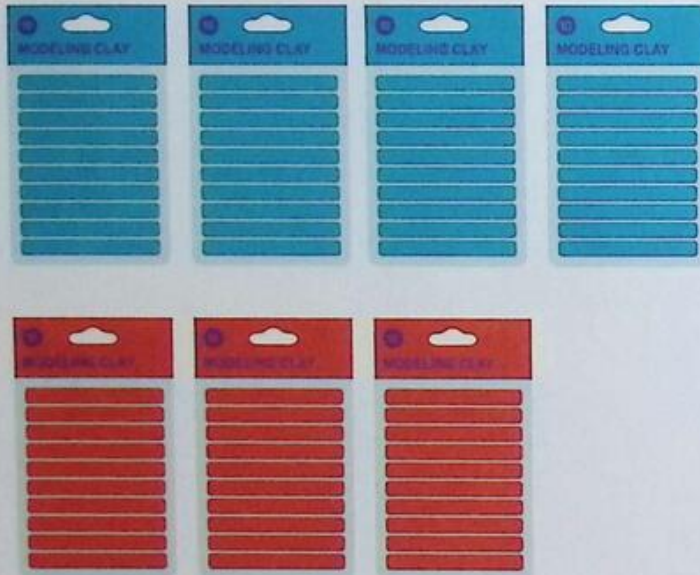
(f) $\square = 3 + 76$

- 3 41 children and 8 adults are in the lunch room.
How many people are in the lunch room?

$$\square \bigcirc \square = \square$$

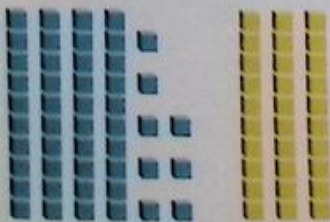
There are $\square$ people in the lunch room.

Think



Sofia has 48 sticks of blue clay.
 She has 30 sticks of orange clay.
 How many sticks of clay does she have in all?

Learn



$$48 + 30 = \boxed{}$$

She has $\boxed{}$ sticks of clay.

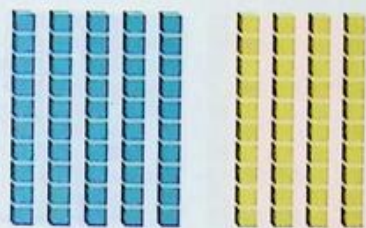
$$\begin{array}{r} 48 + 30 \\ \swarrow \quad \searrow \\ 8 \quad 40 \end{array}$$

4 tens + 3 tens = 7 tens
 70 and 8 make ...



Do

- 1 (a) Add 50 and 40.

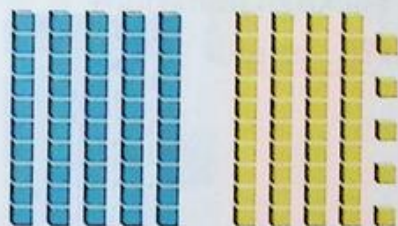


$$50 + 40 = \square$$

5 tens + 4 tens



- (b) Add 50 and 45.



$$50 + 45 = \square$$

$$\begin{array}{r} 50 + 45 \\ \swarrow \quad \searrow \\ 40 \quad 5 \end{array}$$



2 (a) $10 + 40 = \square$

$10 + 46 = \square$

(b) $30 + 40 = \square$

$38 + 40 = \square$

3 (a) $50 + 18 = \square$

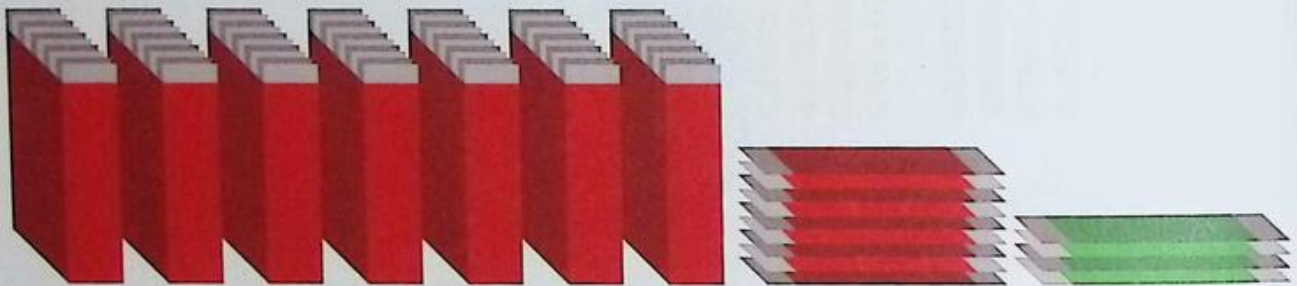
(b) $33 + 30 = \square$

(c) $\square = 60 + 22$

(d) $\square = 27 + 60$

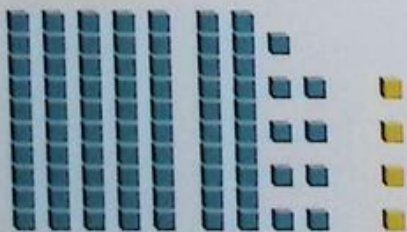
- 4 Dion has 40 stickers and Alex has 38 stickers.
How many stickers do they have in all?

Think



There are 79 sticks of cinnamon gum and 4 sticks of mint gum.
How many sticks of gum are there altogether?

Learn



$$\begin{array}{r} 79 + 4 \\ \swarrow \quad \searrow \\ 1 \quad 3 \\ 79 + 1 = 80 \\ 80 + 3 = 83 \end{array}$$



$$\begin{array}{r} 79 + 4 \\ \swarrow \quad \searrow \\ 70 \quad 9 \\ 9 + 4 = 13 \\ 70 + 13 = 83 \end{array}$$

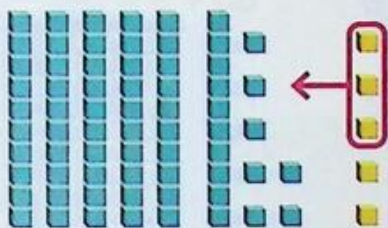


$$79 + 4 = \boxed{}$$

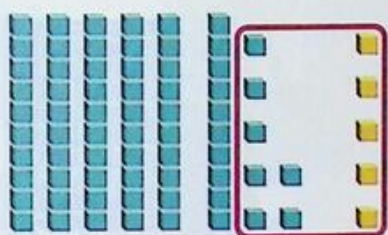
There are $\boxed{}$ sticks of gum altogether.

Do

- ① (a) Add 67 and 5.



3 more will make 70 ...



I know 7 and 5 is ...



$$67 + 5 = \square$$

- (b) Add 83 and 8.



$$83 + 8$$

7

1



$$83 + 8$$

80

3



$$83 + 8 = \square$$

2 (a) $67 + 3 = \square$ $67 + 7 = 70 + \square$ $67 + 7 = \square$

(b) $85 + 5 = \square$ $85 + 9 = 90 + \square$ $85 + 9 = \square$

(c) $52 + 8 = \square$ $52 + 9 = 60 + \square$ $52 + 9 = \square$

3 Add 6 and 75.

$6 + 75 = 75 + 6$

$6 + 75 = \square$



4 (a) $9 + 3 = \square$ $79 + 3 = \square$

(b) $5 + 6 = \square$ $85 + 6 = \square$

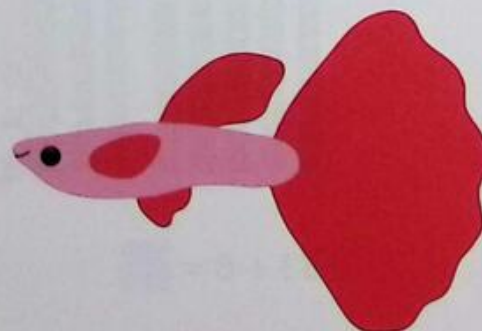
(c) $8 + 6 = \square$ $8 + 46 = \square$

5 There are 47 yellow flowers and 6 purple flowers.
How many flowers are there altogether?

$\square \bigcirc \square = \square$

There are $\square$ flowers altogether.

6 Dion has 36 guppies.
Alex has 8 more guppies than Dion.
How many guppies does Alex have?

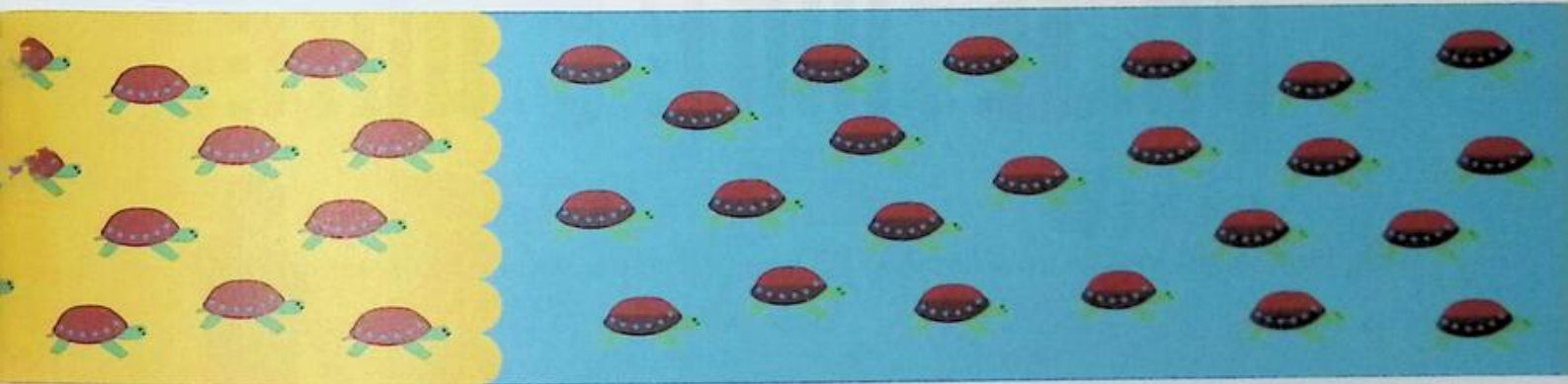


Lesson 4

Add Tens and Ones — Part 1

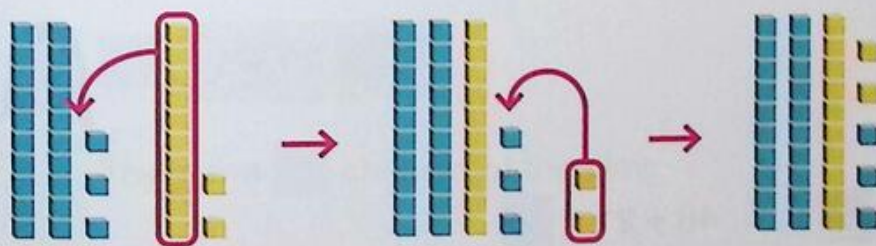
4

Think



There are 23 turtles in the sea.
12 more turtles hatch and join them.
How many turtles are there altogether?

Learn



$$23 + 12 = \square$$

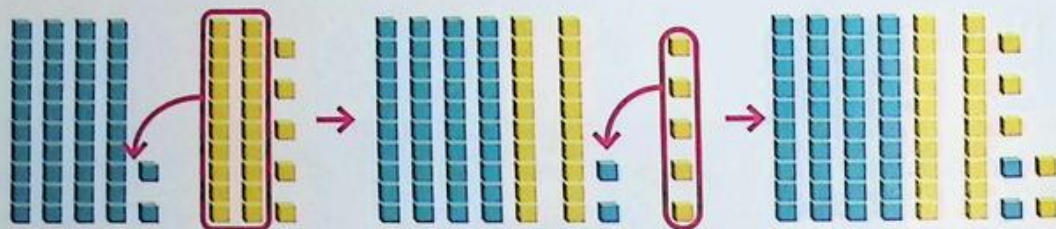
There are $\square$ turtles.

$$\begin{array}{r} 23 + 12 \\ \swarrow \quad \searrow \\ 10 \quad 2 \\ 23 + 10 + 2 \end{array}$$



Do

- 1 (a) Add 42 and 25.

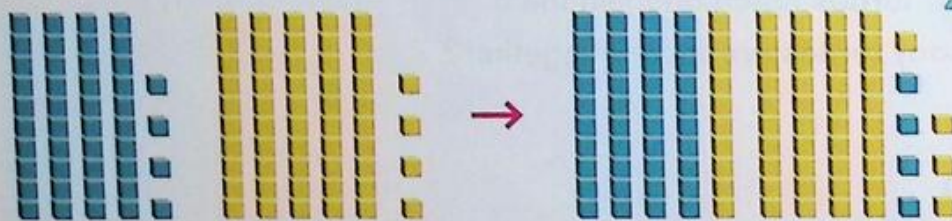


$$42 + 25 = \square$$

$$\begin{array}{r} 42 + 25 \\ \quad \swarrow \searrow \\ \quad 20 \quad 5 \\ 42 + 20 + 5 \end{array}$$



- (b) Add 44 and 54.



$$44 + 54 = \square$$

$$44 + 50 + 4$$



2 (a) $46 + 20 + 1 = \square$

$46 + 21 = \square$

(b) $27 + 60 + 2 = \square$

$27 + 62 = \square$

(c) $52 + 40 + 4 = \square$

$52 + 44 = \square$

3 (a) $25 + 43 = \square$

(b) $45 + 23 = \square$

(c) $36 + 52 = \square$

(d) $32 + 56 = \square$

(e) $53 + 14 = \square$

(f) $55 + 22 = \square$

(g) $38 + 61 = \square$

(h) $72 + 26 = \square$

- 4 There are 45 children acting and 53 children watching at the school play.
How many children are at the play?



$\square \bigcirc \square = \square$

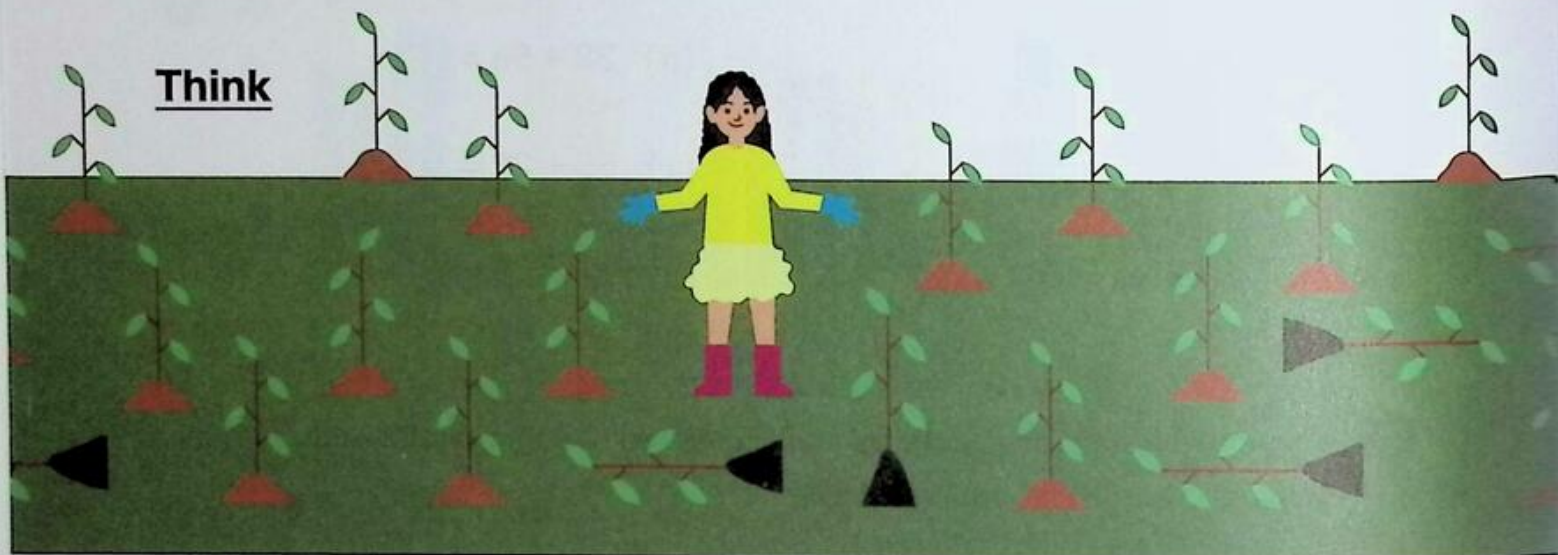
There are $\square$ children at the play.

- 5 Mei has 34 stickers.
Emma gives her 25 more stickers.
How many stickers does Mei have now?

$\square \bigcirc \square = \square$

Mei has $\square$ stickers now.

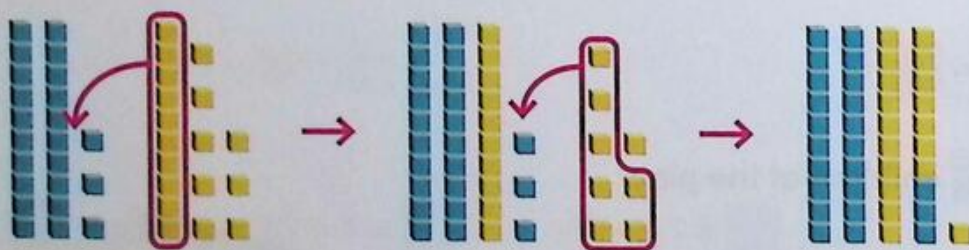


Think

Sofia planted 23 trees.

She will plant 18 more.

How many trees will she plant in all?

Learn

$$23 + 18 = \square$$

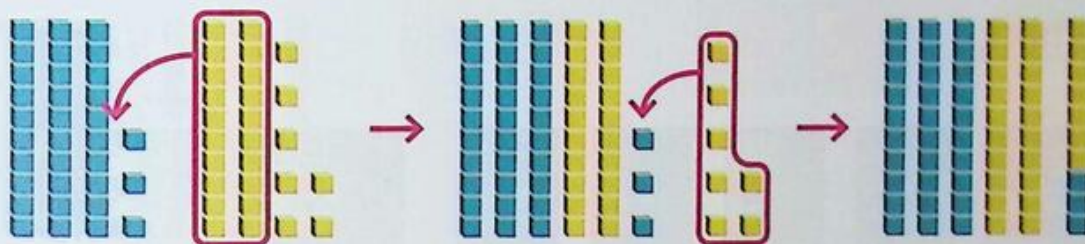
She will plant $\square$ trees.

$$\begin{array}{r} 23 + 18 \\ \swarrow \quad \searrow \\ 10 \quad 8 \\ 23 + 10 + 8 \end{array}$$



Do

- 1 (a) Add 33 and 27.

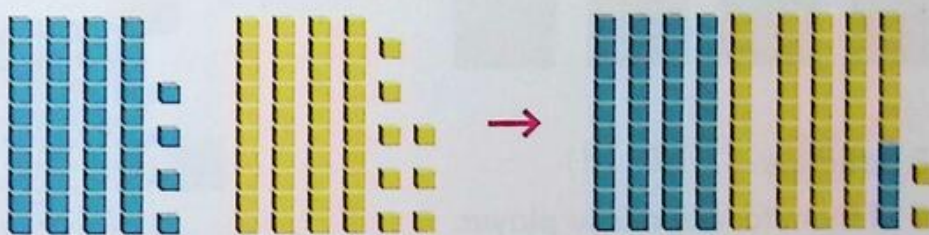


$$33 + 27 = \square$$

$$\begin{array}{r} 33 + 27 \\ \swarrow \searrow \\ 20 \quad 7 \\ 33 + 20 + 7 \end{array}$$



- (b) Add 44 and 48.



$$44 + 48 = \square$$

$$44 + 40 + 8$$



2 (a) $46 + 20 + 4 = \square$ $46 + 24 = \square$

(b) $27 + 60 + 7 = \square$ $27 + 67 = \square$

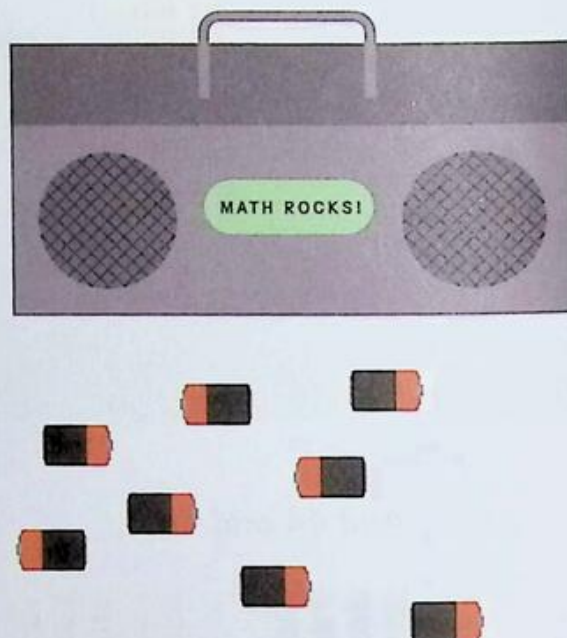
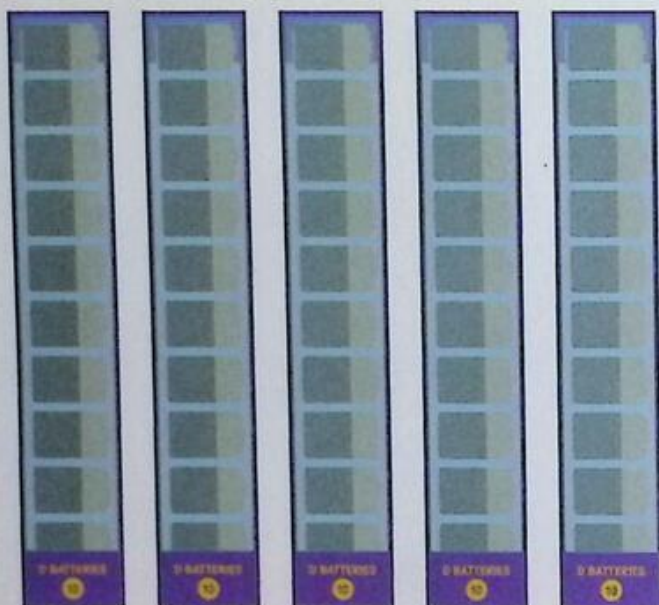
3 (a) $25 + 47 = \square$

(b) $47 + 23 = \square$

(c) $36 + 58 = \square$

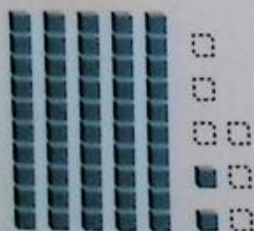
(d) $38 + 56 = \square$

Think



Mei has 58 batteries.
She uses 6 of them for her music player.
How many batteries does she have left?

Learn



$$58 - 6 = \boxed{}$$

She has $\boxed{}$ batteries left.

$$\begin{array}{r} 58 - 6 \\ \swarrow \quad \searrow \\ 50 \quad 8 \end{array}$$

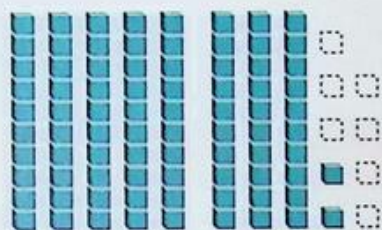
$$8 - 6 = 2$$

50 and 2 make ...

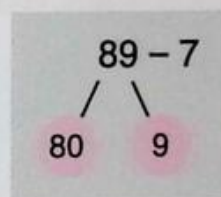


Do

- 1 (a) Subtract 7 from 89.

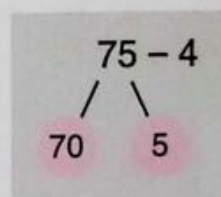


$$89 - 7 = \square$$



- (b) Subtract 4 from 75.

$$75 - 4 = \square$$



2 (a) $57 - 4 = \square$

(b) $98 - 5 = \square$

(c) $79 - 8 = \square$

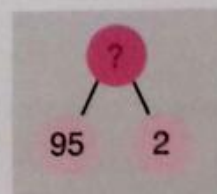
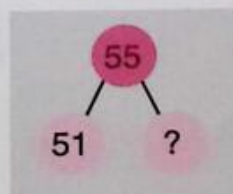
(d) $75 - 0 = \square$

(e) $45 - 3 = \square$

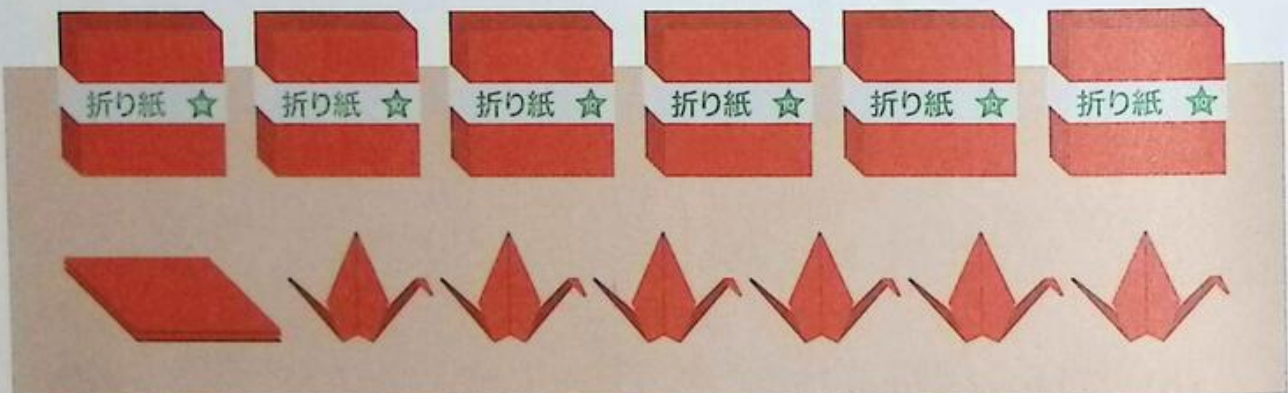
(f) $57 - 7 = \square$

3 (a) $55 - \square = 51$

(b) $\square - 2 = 95$

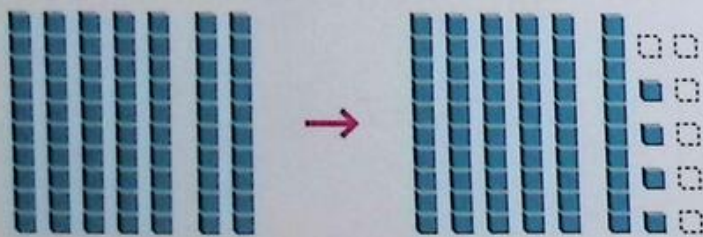


Think



Dion has 70 pieces of origami paper.
 He uses 6 of them.
 How many pieces of origami paper does he have left?

Learn



$$70 - 6 = \square$$

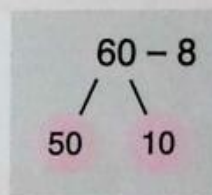
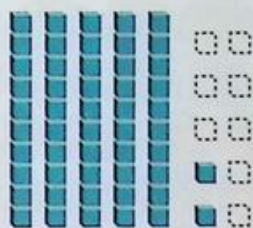
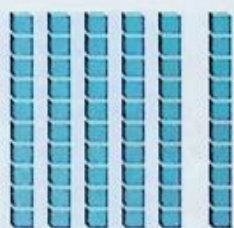
He has $\square$ sheets of origami paper left.

$$\begin{array}{r} 70 - 6 \\ \swarrow \searrow \\ 60 \quad 10 \\ 10 - 6 = 4 \\ 60 \text{ and } 4 \text{ make } \dots \end{array}$$



Do

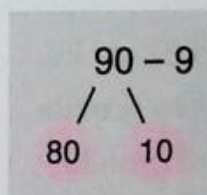
- ① (a) Subtract 8 from 60.



$$60 - 8 = \square$$

- (b) Subtract 9 from 90.

$$90 - 9 = \square$$



② (a) $70 - 4 = \square$

(b) $90 - 1 = \square$

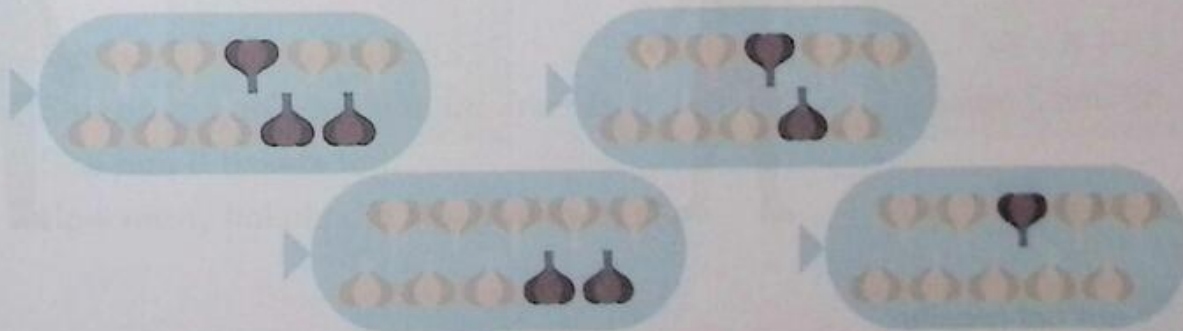
(c) $40 - 5 = \square$

(d) $50 - 3 = \square$

(e) $60 - 2 = \square$

(f) $80 - 7 = \square$

- ③ There are 4 bags with 10 garlic bulbs in each bag.
8 of the garlic bulbs are rotten.
How many garlic bulbs are not rotten?

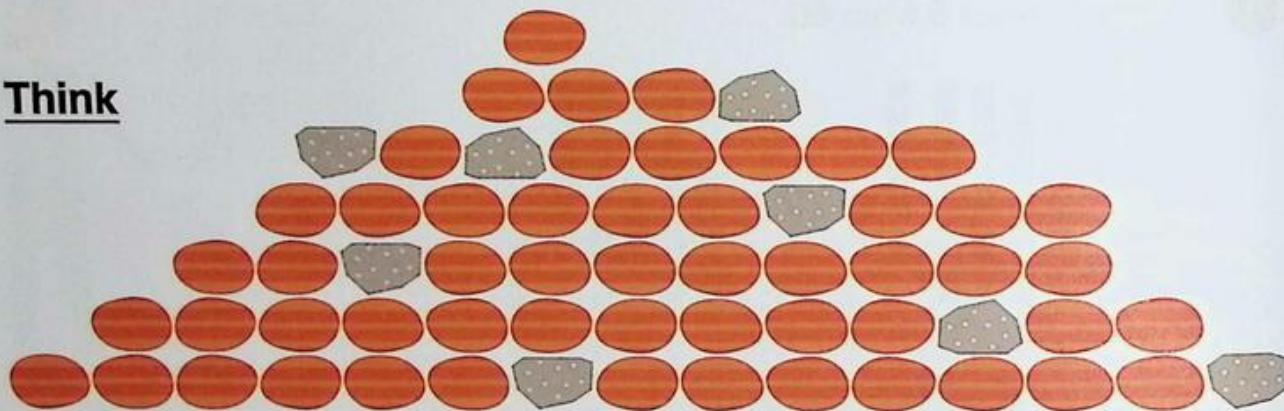


Lesson 8

Subtract Ones — Part 2

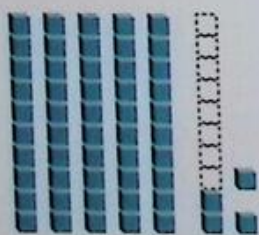
8

Think



Sofia collected 62 rocks.
8 of the rocks are granite.
The rest are not granite.
How many rocks are not granite?

Learn



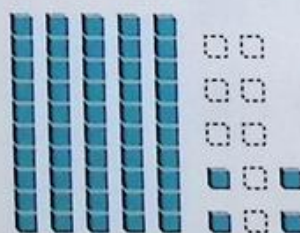
$$\begin{array}{r} 62 - 8 \\ \hline 2 \quad 60 \end{array}$$

$$60 - 8 = 52$$

52 and 2 make ...

$$62 - 8 = \boxed{}$$

$\boxed{}$ are not granite.



$$\begin{array}{r} 62 - 8 \\ \hline 50 \quad 12 \end{array}$$

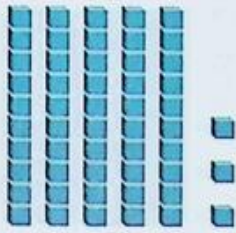
$$12 - 8 = 4$$

50 and 4 make ...

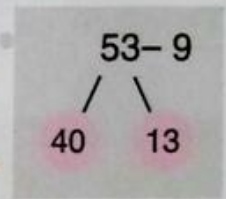
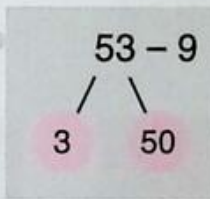


Do

- ① Subtract 9 from 53.



$$53 - 9 = \square$$



② (a) $80 - 7 = \square$ $83 - 7 = \square + 3$ $83 - 7 = \square$

(b) $90 - 4 = \square$ $92 - 4 = \square + 2$ $92 - 4 = \square$

③ (a) $14 - 7 = \square$ $24 - 7 = \square$

(b) $15 - 8 = \square$ $25 - 8 = \square$

④ (a) $21 - 8 = \square$ (b) $24 - 5 = \square$

(c) $32 - 7 = \square$ (d) $21 - 9 = \square$

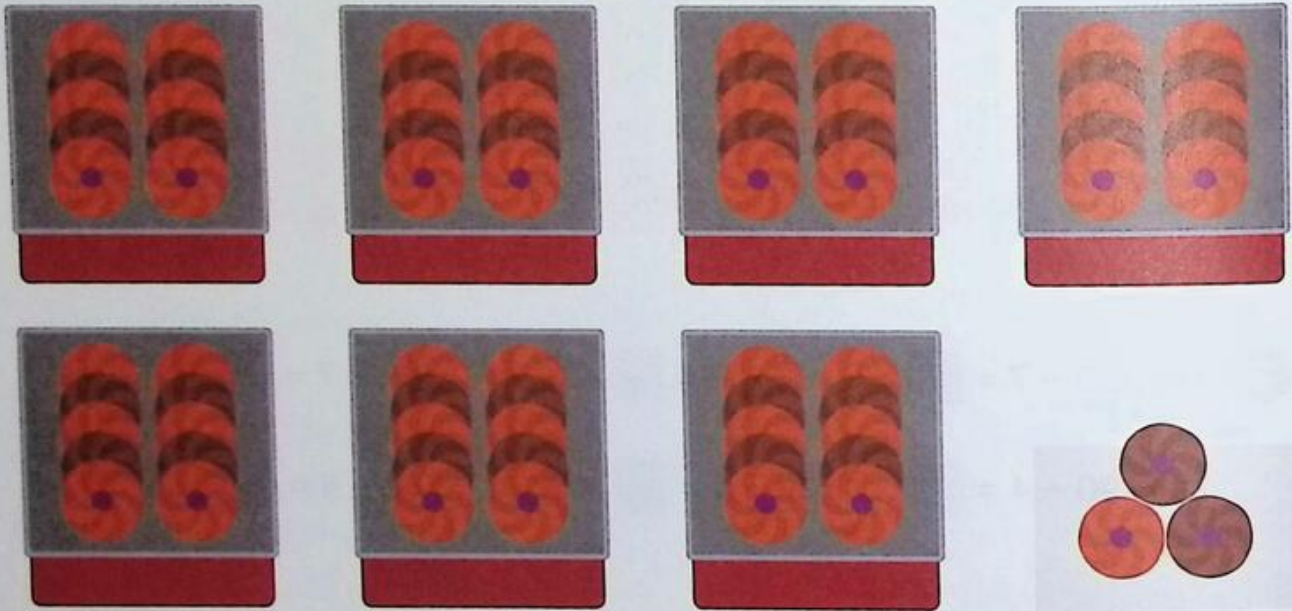
- ⑤ Mei had 76 raffle tickets.
She gave some away to her friends.
She has 8 tickets left.
How many tickets did she give away?

Lesson 9

Subtract Tens

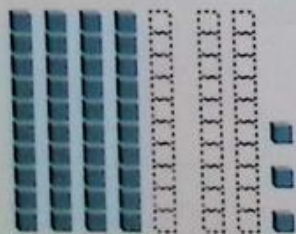
9

Think



There were 73 cookies at the party.
30 of them were eaten.
How many cookies are left?

Learn



$$73 - 30 = \square$$

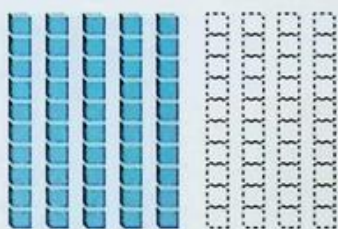
$\square$ cookies are left.

$$\begin{array}{r} 73 - 30 \\ \swarrow \quad \searrow \\ 3 \quad 70 \end{array}$$
$$70 - 30 = 40$$
$$40 \text{ and } 3 \text{ make } \dots$$



Do

- 1 (a) Subtract 40 from 90.

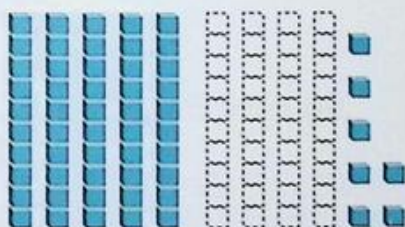


$$90 - 40 = \square$$

9 tens - 4 tens



- (b) Subtract 40 from 97.



$$97 - 40 = \square$$

$$\begin{array}{r} 97 - 40 \\ \swarrow \searrow \\ 90 \quad 7 \end{array}$$



- 2 (a) $80 - 50 = \square$ (b) $75 - 60 = \square$ (c) $63 - 10 = \square$
(d) $96 - 60 = \square$ (e) $46 - 30 = \square$ (f) $100 - 40 = \square$

- 3 (a) $75 - \square = 55$

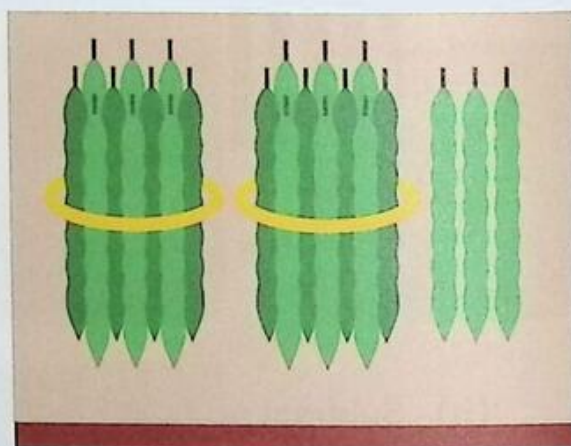
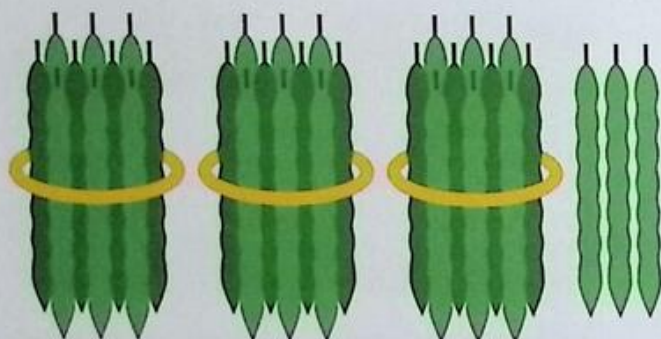
$$\begin{array}{r} 75 \\ \swarrow \searrow \\ 55 \quad ? \end{array}$$



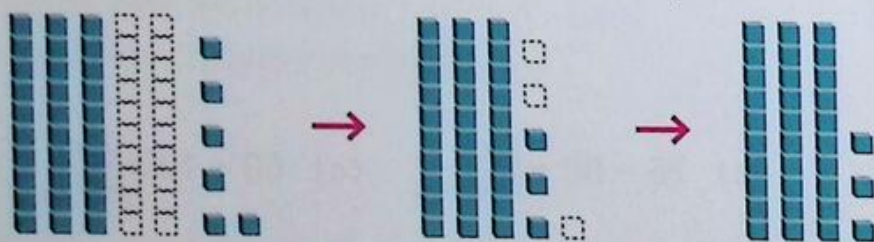
- (b) $\square - 30 = 50$

$$\begin{array}{r} ? \\ \swarrow \searrow \\ 50 \quad 30 \end{array}$$



Think

There are 56 green beans.
23 of them are used for dinner.
How many green beans are left?

Learn

$$56 - 23 = \boxed{}$$

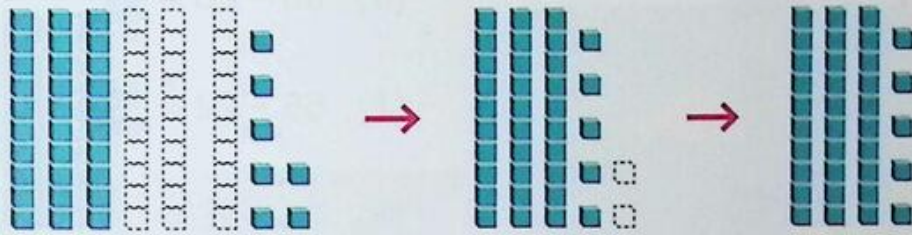
There are $\boxed{}$ green beans left.

$$\begin{array}{r} 56 - 23 \\ \swarrow \quad \searrow \\ 20 \quad 3 \\ 56 - 20 - 3 \end{array}$$



Do

- 1 (a) Subtract 32 from 67.



$$67 - 32 = \square$$

$$\begin{array}{r} 67 - 32 \\ \swarrow \searrow \\ 30 \quad 2 \\ 67 - 30 - 2 \end{array}$$



- (b) Subtract 45 from 89.



$$89 - 45 = \square$$

$$89 - 40 - 5$$



2 (a) $86 - 20 - 1 = \square$ $86 - 21 = \square$

(b) $67 - 40 - 2 = \square$ $67 - 42 = \square$

(c) $94 - 40 - 2 = \square$ $94 - 42 = \square$

3 (a) $47 - 13 = \square$

(b) $65 - 42 = \square$

(c) $74 - 21 = \square$

(d) $98 - 86 = \square$

(e) $85 - 34 = \square$

(f) $55 - 22 = \square$

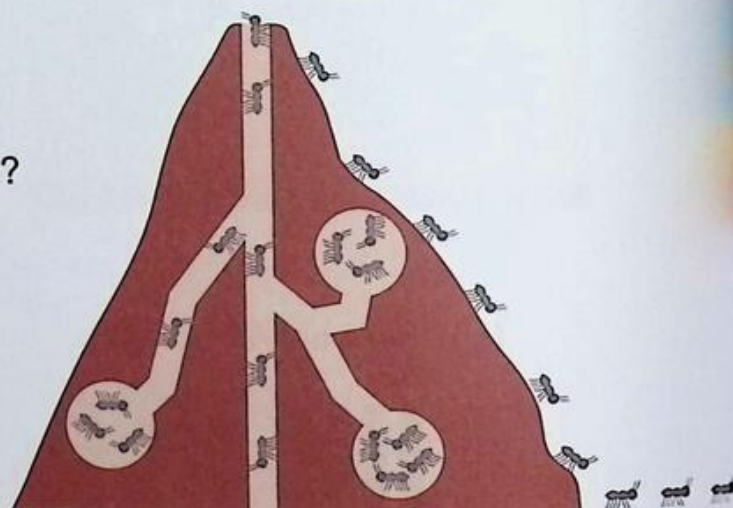
(g) $68 - 31 = \square$

(h) $79 - 26 = \square$

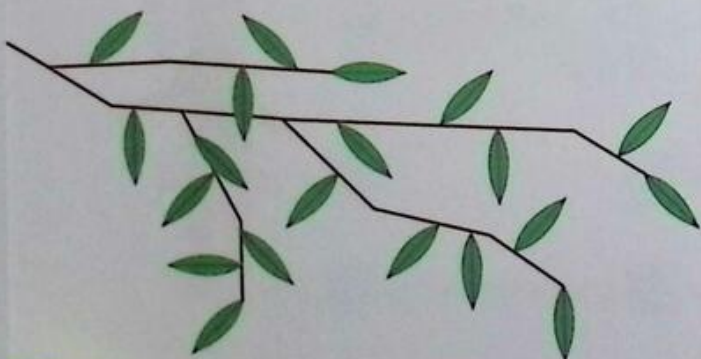
- 4 There are 45 ants in a colony.
35 ants left to look for food.
How many ants are still in the colony?

$\square \bigcirc \square = \square$

There are $\square$ ants in the colony.

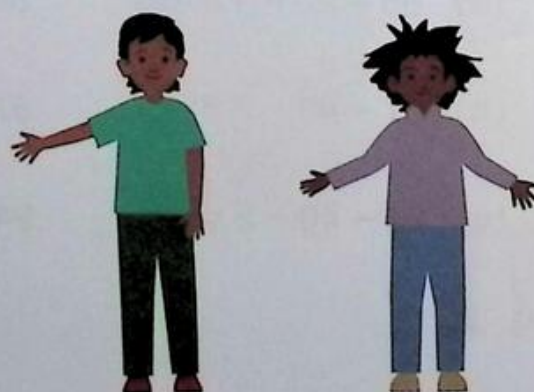


- 5 Dion collected 67 leaves.
Alex collected 53 leaves.
How many more leaves did Dion collect than Alex?



$\square \bigcirc \square = \square$

Dion collected $\square$ more leaves.

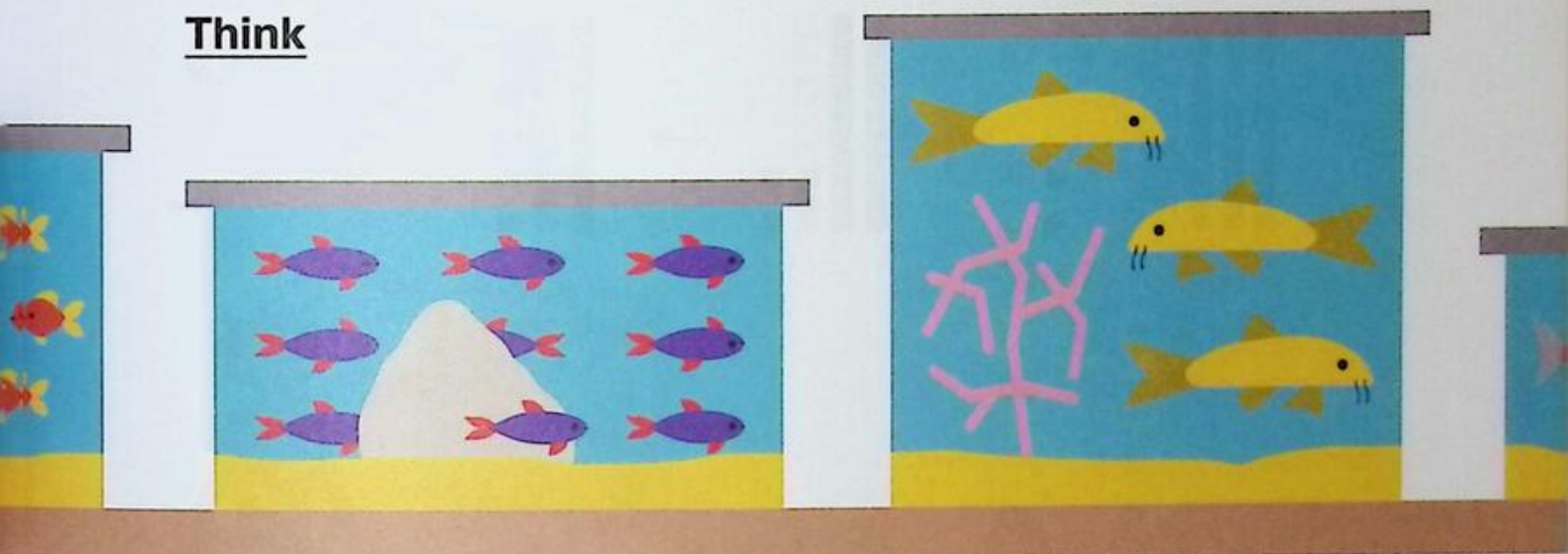


Lesson 11

Subtract Tens and Ones — Part 2

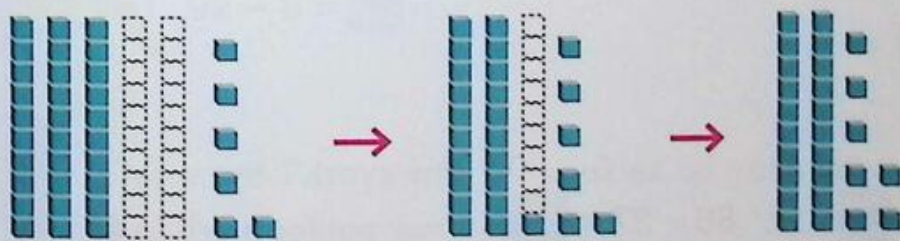
11

Think



A pet store had 56 fish.
It sold 29 fish.
How many fish are left in the store?

Learn



$$56 - 29 = \square$$

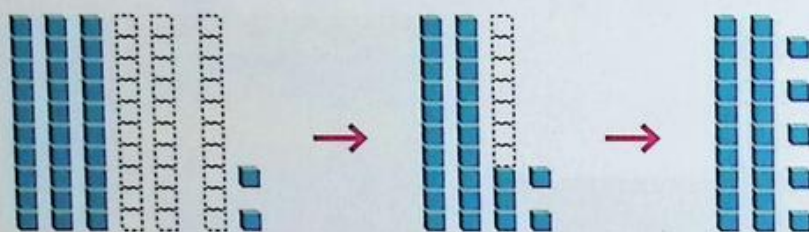
There are $\square$ fish left.

$$\begin{array}{r} 56 - 29 \\ \swarrow \quad \searrow \\ 20 \quad 9 \\ 56 - 20 - 9 \end{array}$$



Do

- 1 (a) Subtract 37 from 62.

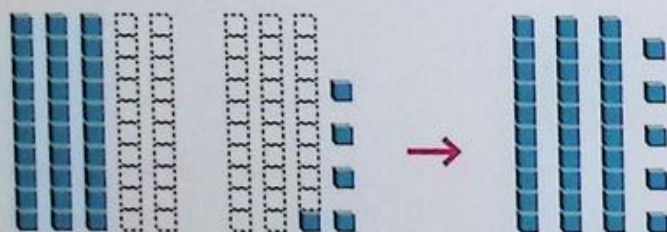


$$62 - 37 = \square$$

$$\begin{array}{r} 62 - 37 \\ \swarrow \quad \searrow \\ 30 \quad 7 \\ 62 - 30 - 7 \end{array}$$



- (b) Subtract 49 from 84.



$$84 - 49 = \square$$

$$84 - 40 - 9$$



2 (a) $86 - 20 - 7 = \square$

$$86 - 27 = \square$$

(b) $67 - 40 - 9 = \square$

$$67 - 49 = \square$$

3 (a) $47 - 18 = \square$

(b) $65 - 47 = \square$

(c) $74 - 27 = \square$

(d) $98 - 89 = \square$

1 (a) $63 + 4 =$

(b) $97 - 4 =$

(c) $41 + 8 =$

(d) $46 + 4 =$

(e) $40 + 50 =$

(f) $90 - 70 =$

(g) $27 + 40 =$

(h) $82 - 30 =$

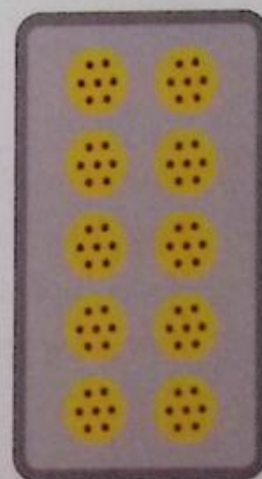
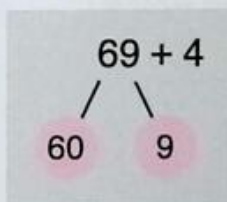
2 (a) $69 + 4 =$

(b) $8 + 88 =$

(c) $50 - 6 =$

(d) $73 - 7 =$

(e) $92 - 8 =$



- 3 There are 7 trays with 10 cookies on each tray.
4 of the cookies were eaten.
How many cookies are left?

- 4 There are 56 purple flags and 40 orange flags at a parade.
- (a) How many fewer orange flags than purple flags are there?
- (b) How many flags are there in all?



5 (a) $41 + 21 = \square$

(b) $99 - 28 = \square$

(c) $32 + 55 = \square$

(d) $78 - 32 = \square$

(e) $\square + 23 = 88$

(f) $77 - \square = 72$

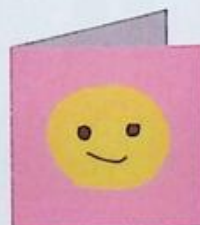
(g) $52 + \square = 64$

(h) $\square - 24 = 41$

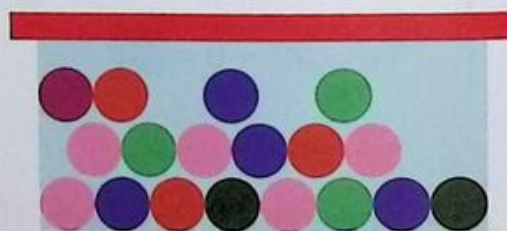
- 6 Ella made 32 paper hats.
Pedro made 17 more hats than Ella.
How many paper hats did Pedro make?



- 7 Nora made 45 cards.
Max made 23 cards.
(a) How many more cards did Nora make than Max?
(b) How many cards did they make altogether?



- 8 There are 58 bouncy balls in a tub.
Alex put in 30 more bouncy balls.
Rowan put in 9 more bouncy balls.
How many bouncy balls are in the tub now?



9 (a) $28 + 40 + 9 = \square$

(b) $73 - 30 - 8 = \square$

(c) $42 + 38 = \square$

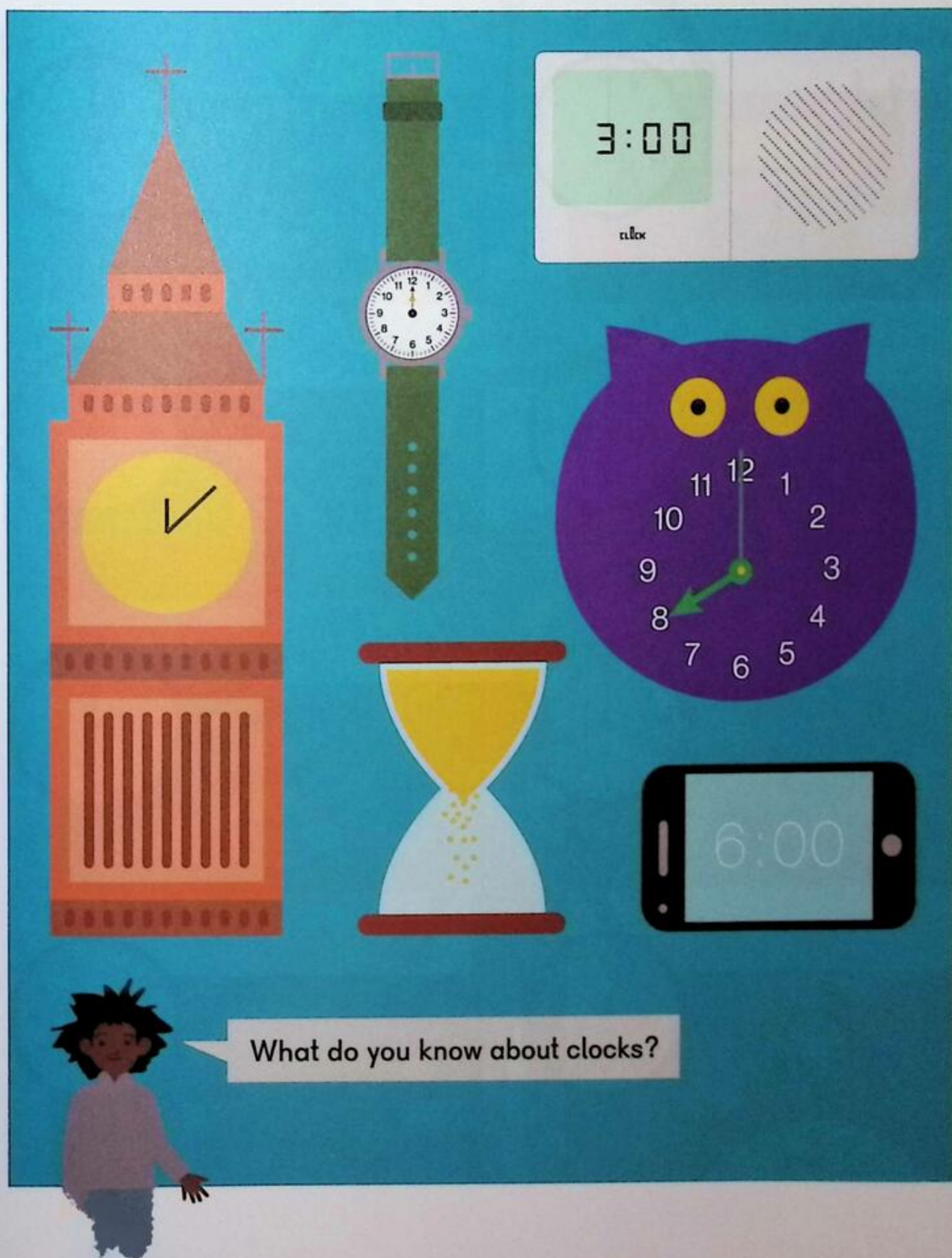
(d) $82 - 63 = \square$

(e) $38 + 54 = \square$

(f) $71 - 18 = \square$

Chapter 18

Time



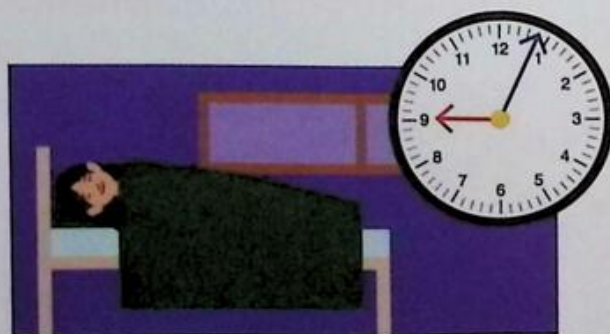
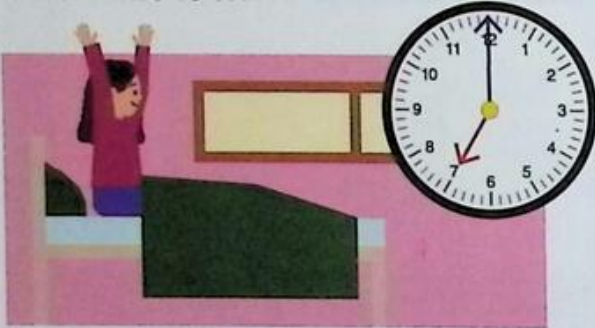
Lesson 1

Telling Time to the Hour

1

Think

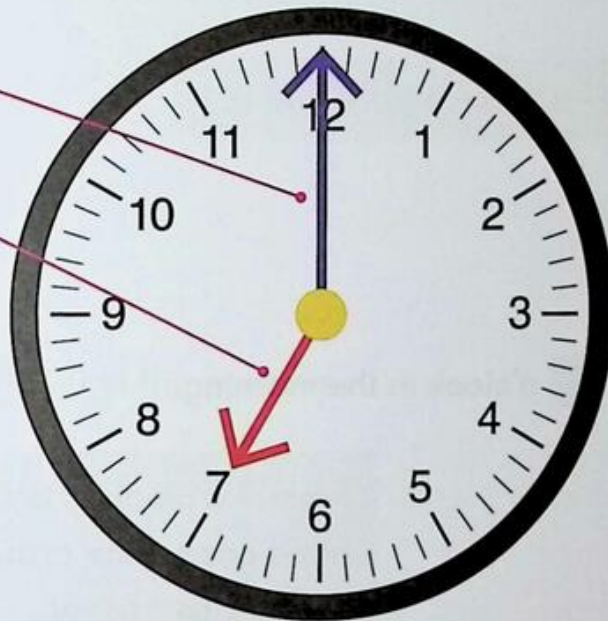
What time is it?



Learn

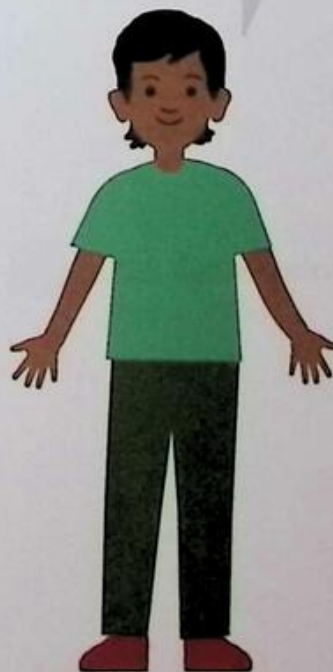
minute hand

hour hand



O'clock means of the clock.

At 7 o'clock the **hour** hand points to 7
and the **minute** hand points to 12.



Sofia woke up at 7 o'clock in the morning.



She ate breakfast at o'clock in the morning.



From 7 o'clock to 8 o'clock, the minute hand goes once around the clock.
1 hour has passed.
There are 60 minutes in 1 hour.

She arrived at school at o'clock in the morning.



She ate lunch at noon.



She left school at 4:00 in the afternoon.



We can write 4 o'clock as 4:00.



She ate dinner at :00 in the evening.



She brushed her teeth a little before o'clock in the evening.



She got into bed a little after :00 in the evening.



Sofia woke up at 7 o'clock in the morning.



She ate breakfast at o'clock in the morning.



From 7 o'clock to 8 o'clock, the minute hand goes once around the clock.
1 hour has passed.
There are 60 minutes in 1 hour.

She arrived at school at o'clock in the morning.



She ate lunch at noon.



She left school at 4:00 in the afternoon.



We can write 4 o'clock as 4:00.



She ate dinner at :00 in the evening.



She brushed her teeth a little before o'clock in the evening.



She got into bed a little after :00 in the evening.



Do

1 How many times does the minute hand go all the way around the clock ...

(a) from 9 o'clock to 12 o'clock?

(b) from 12 o'clock to 4 o'clock?

(c) from 4:00 to 6:00?

2 Show the times on your clock.

(a) 12 o'clock

(b) 3 o'clock

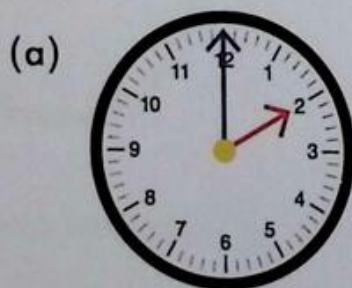
(c) 5 o'clock

(d) 10 o'clock

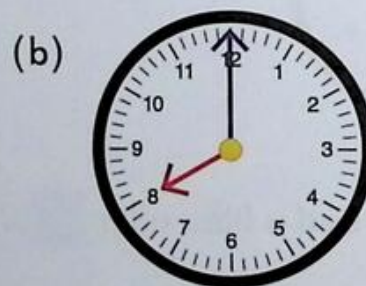
(e) 2:00

(f) 11:00

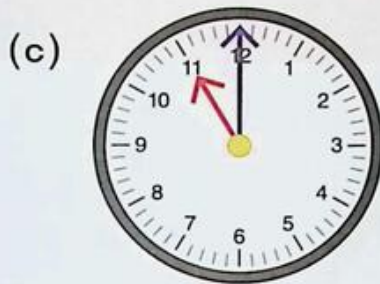
3 What time is it?



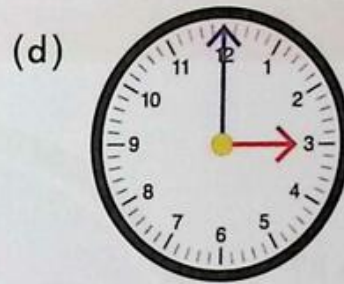
It is o'clock.



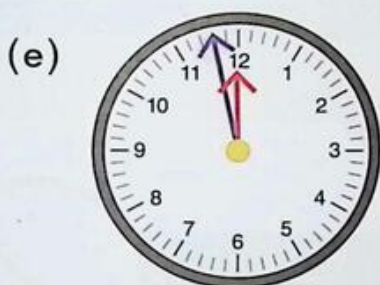
It is o'clock.



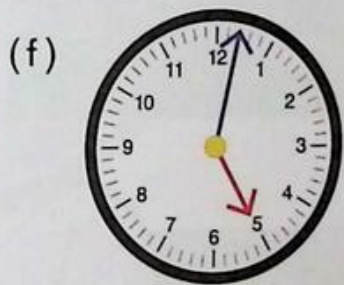
It is :00.



It is :00.



It is a little before o'clock.



It is a little after o'clock.

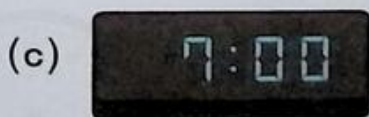
4 What time is it?



It is o'clock.



It is o'clock.



It is o'clock.

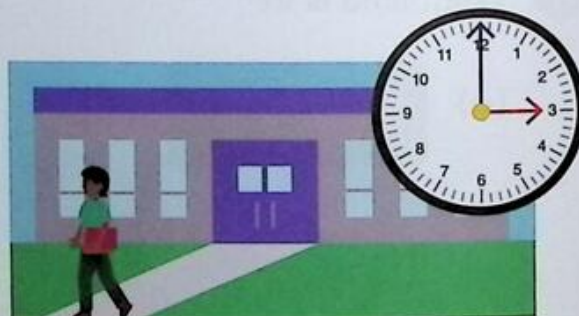
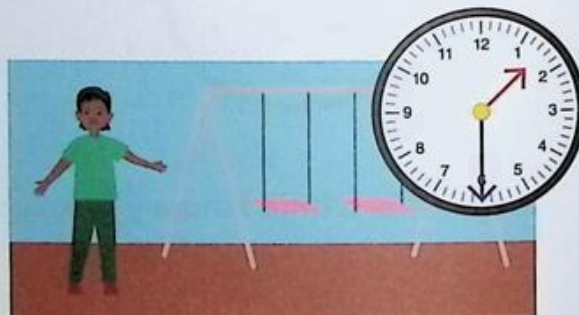
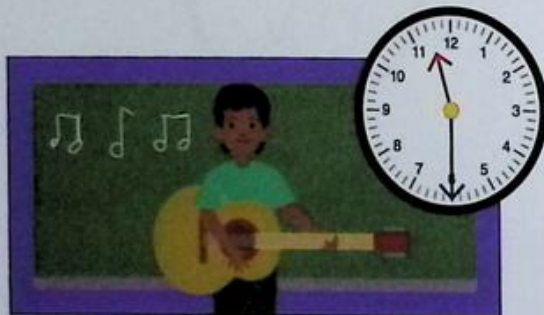
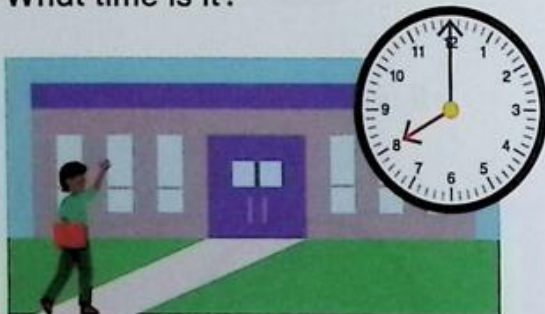


It is o'clock.

Time to the Half Hour

Think

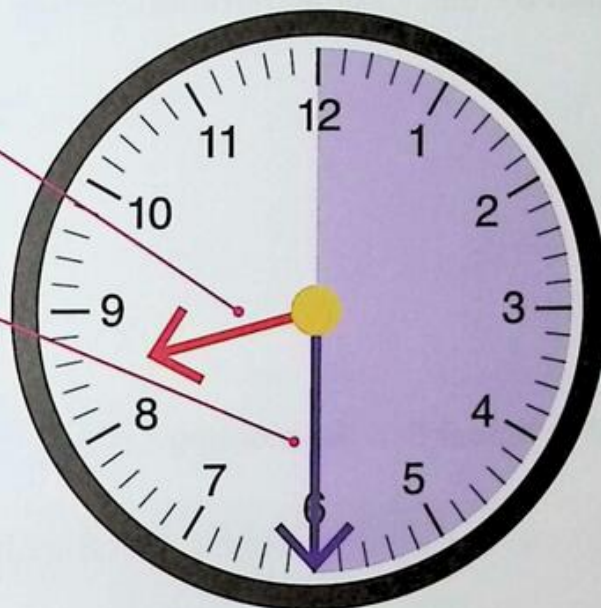
What time is it?



Learn

hour hand

minute hand



During the half hour after 8 o'clock,
the minute hand moves halfway around the clock.
The time is **half past 8**.
The minute hand points to 6.
The hour hand points halfway between 8 and 9.



Learn

Alex arrived at school at 8 o'clock in the morning.



He had math class at half past 8 in the morning.



We can write half past 8 as 8:30.



He had music class at 11:30 in the morning.



There are 30 minutes in a half-hour.
2 half-hours make 1 hour.



He had recess at 1:30 in the afternoon.



He had art class at : in the afternoon.



He left school at : in the afternoon.



How many minutes passed between half past 2 and 3 o'clock?



He washed his hands a little before half past .



He turned off his light a little after :30.



Do

1



The time is : .

The minute hand is pointing to
and the hour hand is pointing to .



The time is : .

The minute hand is pointing to and the hour
hand is pointing halfway between and .

2 Show the times on your clock.

(a) Half past 12.

(b) Half past 2.

(c) Half past 3.

(d) 7:30

(e) 9:30

(f) 11:30

3 What time is it?

(a)

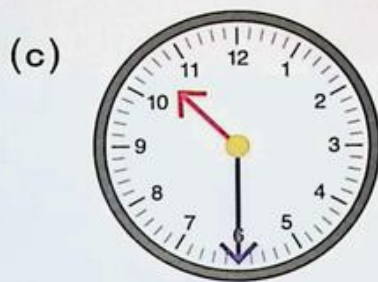


It is half past .

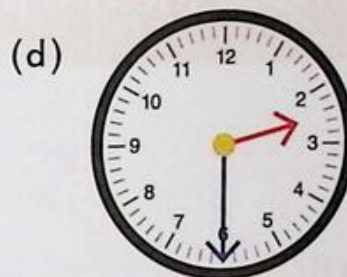
(b)



It is half past .



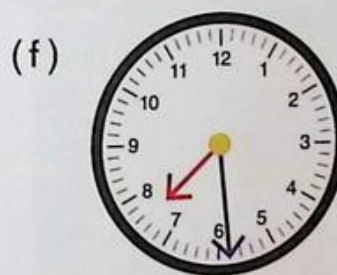
It is : .



It is : .



It is a little after half past .



It is almost half past .

4 What time is it?



It is half past .



It is half past .



It is half past .



It is half past .

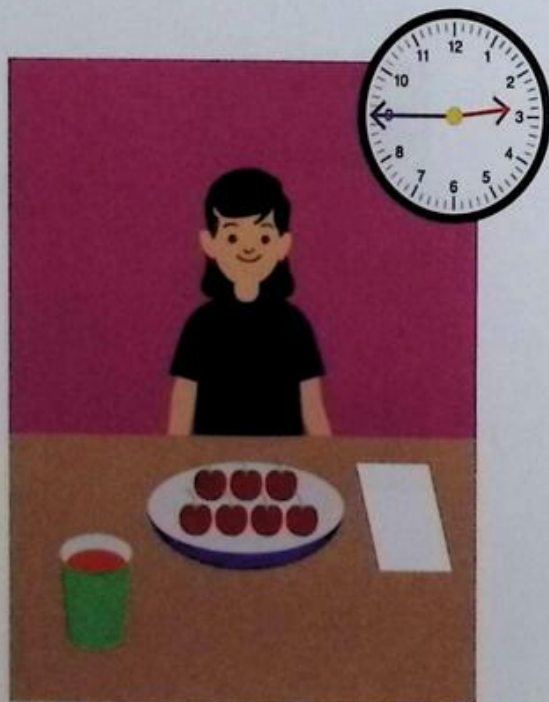
Lesson 3

Telling Time to the 5 Minutes

3

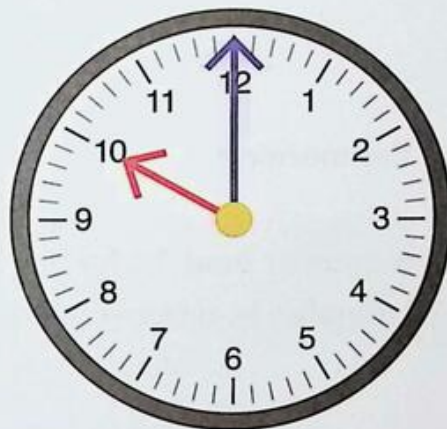
Think

What time is it?

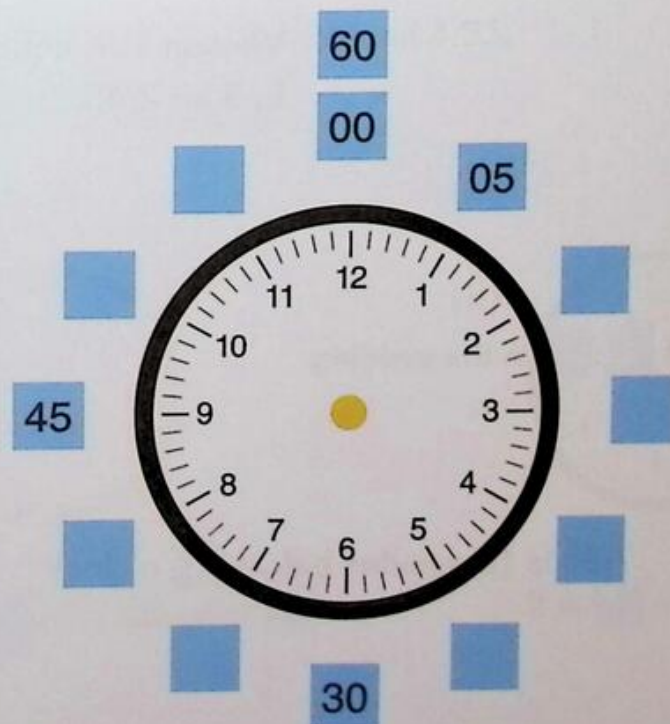


Learn

5 minutes after 10:00 is 10:05.
We read this as **ten oh five**.



Count the minutes by fives.



Mei had soccer practice at : in the morning.



She played with her dog at : in the morning.



We can say a quarter past 11 for 11:15.
There are 15 minutes in a quarter-hour.



She had a snack at : in the afternoon.



We can say a quarter
to 3 for 2:45.



She took a bath at : in the evening.



7:50 is 10 minutes before o'clock.

Do

1 Show the times on your clock.

(a) 1:05

(b) 1:55

(c) 3:15

(d) 4:30

(e) 6:35

(f) 10:50

(g) 20 past 4

(h) 10 to 7

2 Show on your clocks ...

(a) a time that is after 2:05 but before 2:10.

(b) a time that is after 3:55 but before 4:00.

(c) a time that is between 4:30 and 4:35.

3 What time is it?

(a)



It is minutes after .

(b)



It is minutes after .

4 (a)



It is : .

(b)



It is : .

(c)



It is : .

It is minutes to .

(d)



It is : .

It is minutes to .

5 What time is it?

(a)



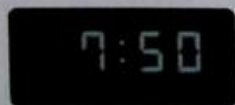
It is minutes after .

(b)



It is minutes after .

(c)



It is minutes after .

(d)



It is minutes after .

6 What time is it?



It is minutes to .



It is minutes to .



It is minutes to .

7 Alex, Mei, and Sofia got to school at ...



(a) Who got to school first?

(b) Who got to school next?

1 (a)



The hour hand is pointing to .

The minute hand is pointing to .

It is : .

(b)



The minute hand is pointing to .

The hour hand is halfway between and .

It is : .

(c)



The minute hand is pointing to .

The hour hand is between and .

It is : .

(d)

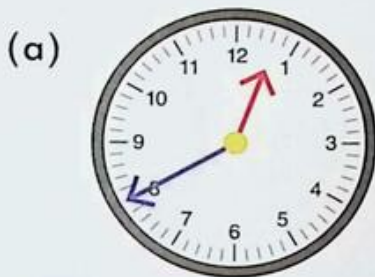


The minute hand is pointing to .

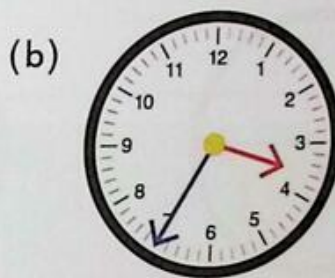
The hour hand is between and .

It is : .

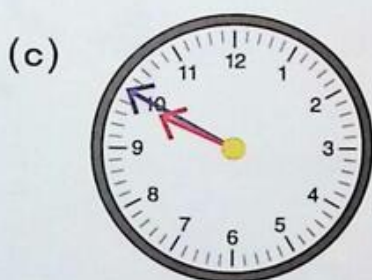
2 What time is it?



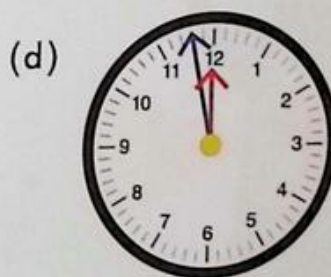
It is : .



It is : .



It is to .



It is a little before .



It is minutes after .



It is minutes before .



It is minutes after .



It is minutes before .

3 Alex, Mei, and Sofia eat dinner at ...



Alex



Mei



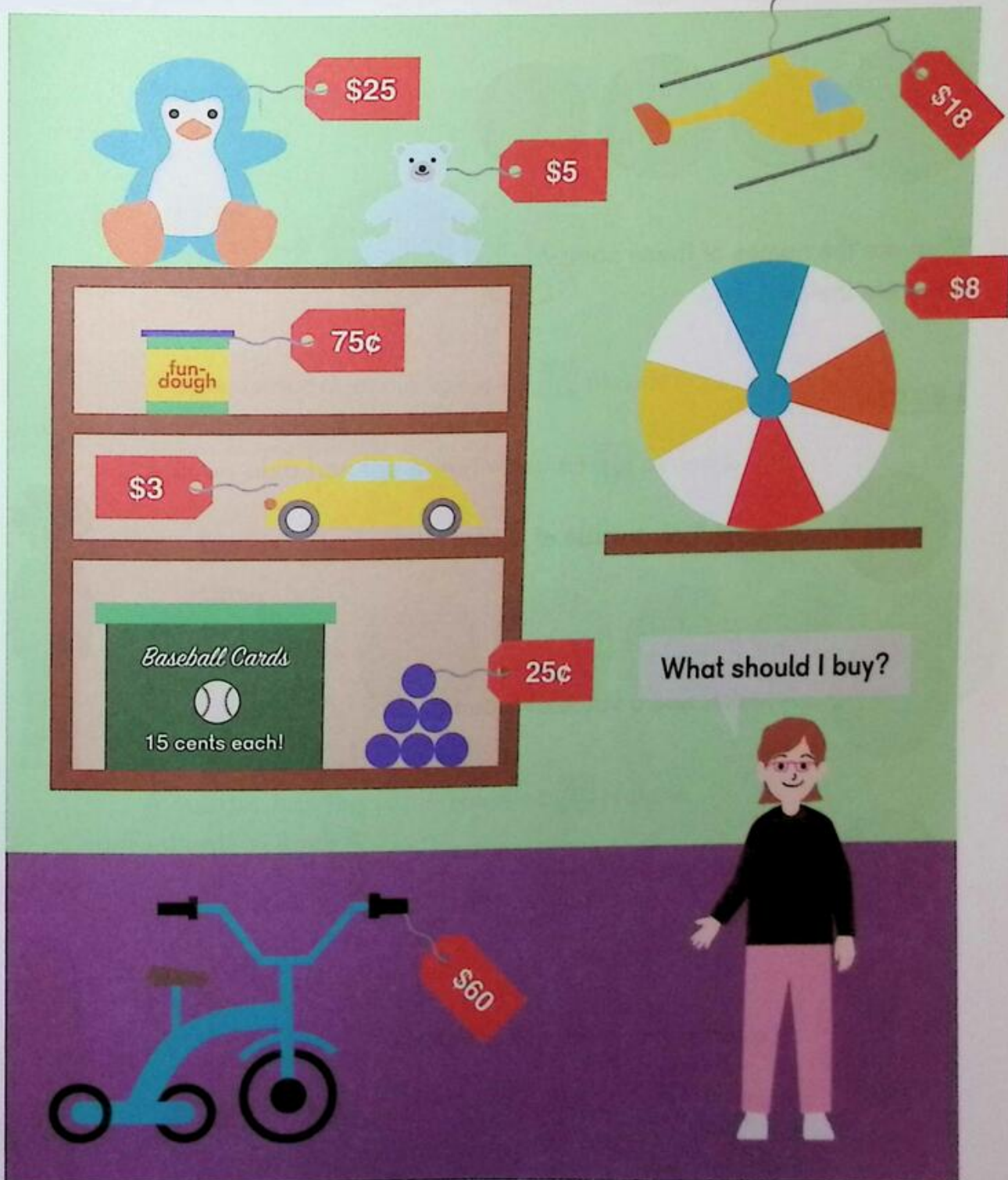
Sofia



- (a) What time did each person eat dinner?
- (b) Who ate dinner first?
- (c) Who ate dinner last?

Chapter 19

Money



Lesson 1

Coins

1

Think



What are the names of these coins?
What are their values?

Learn



A **penny** has a value of 1 cent.



A **nickel** has a value of 5 cents.



A **dime** has a value of 10 cents.



A **quarter** has a value of 25 cents.

¢ means cent.

We read 5¢ as five cents.



A dime is smaller than a penny, but it is **worth** more.



Do

1 (a)



A nickel has the same value as pennies.

(b)



A dime has the same value as nickels.

A dime also has the same value as pennies.

(c)



A quarter has the same value as nickels.



5, 10, 15, 20, 25 cents

- 2 (a) Sofia made 25¢ like this.



10, 20, 21, 22, 23, 24, 25 cents

Find more ways to make 25¢.



- (b) Mei made 50¢ like this.



25, 30, 40, 50 cents

Find more ways to make 50¢.



- (c) Alex made 100¢ like this.



25, 50, 75, 80, 90, 100 cents

Find more ways to make 100¢.



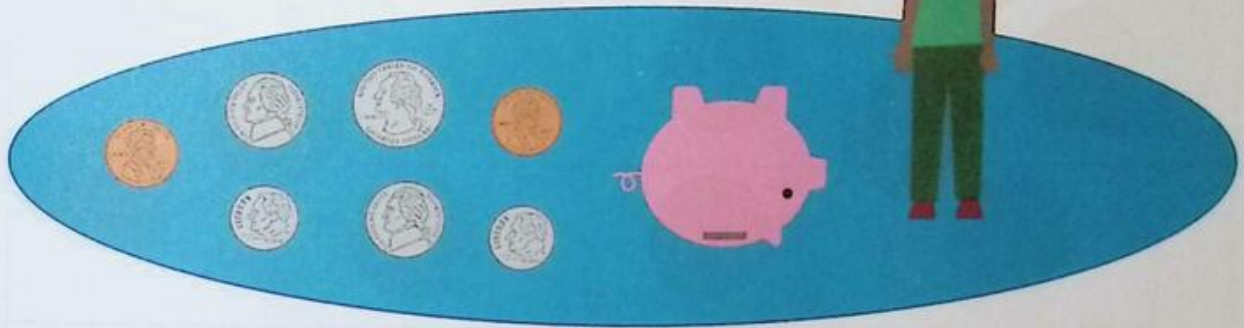
Lesson 2

Counting Money

2

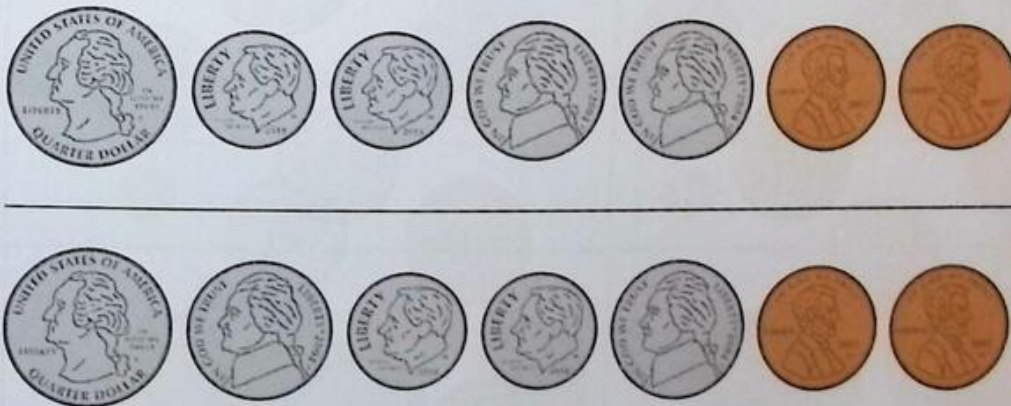
Think

How much money do I have?



Learn

25, 35, 45, 50, 55, 56, 57 cents



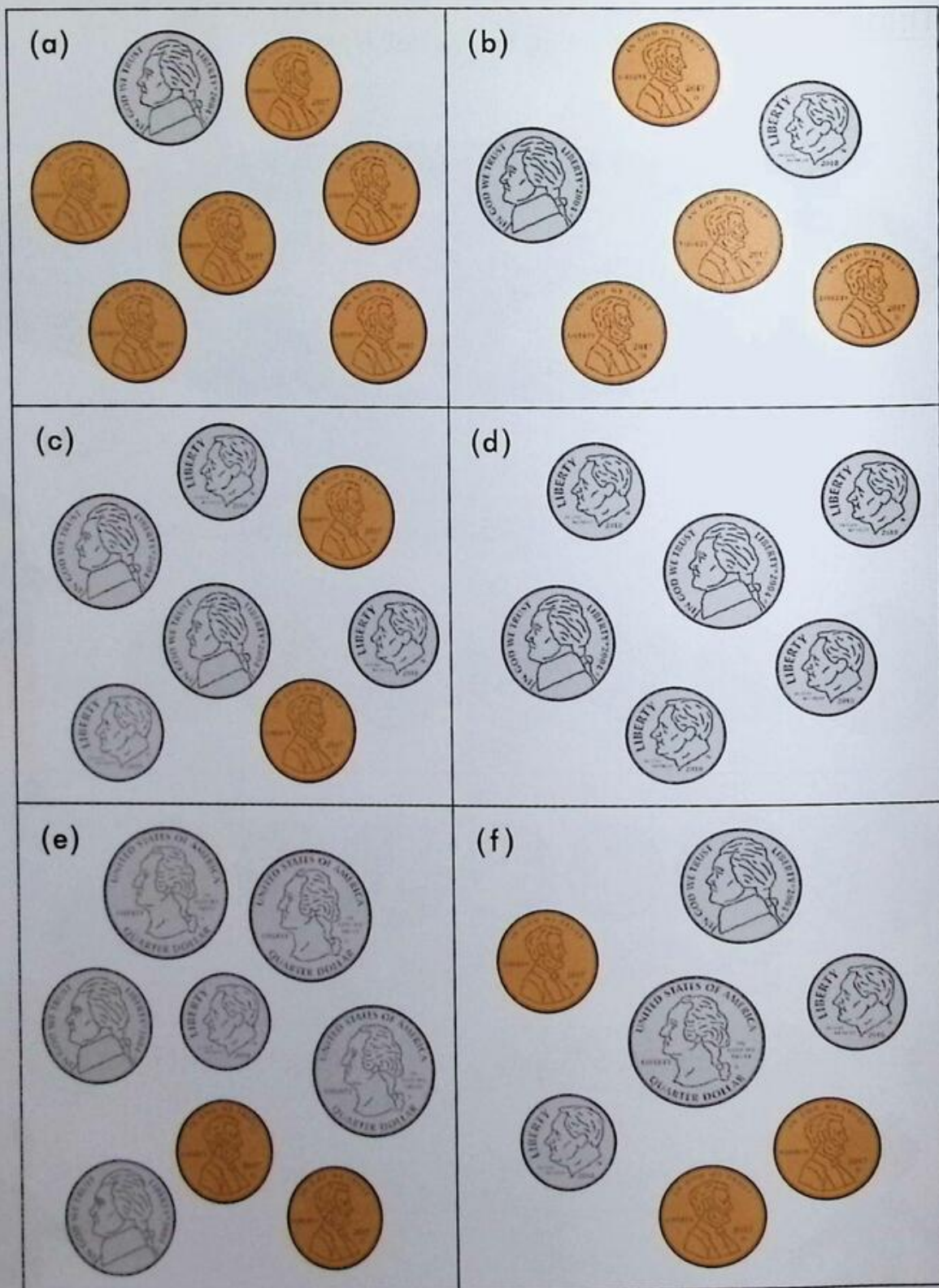
25, 30, 40, 50, 55, 56, 57 cents

The number of coins is 7.
The amount of money is 57¢.

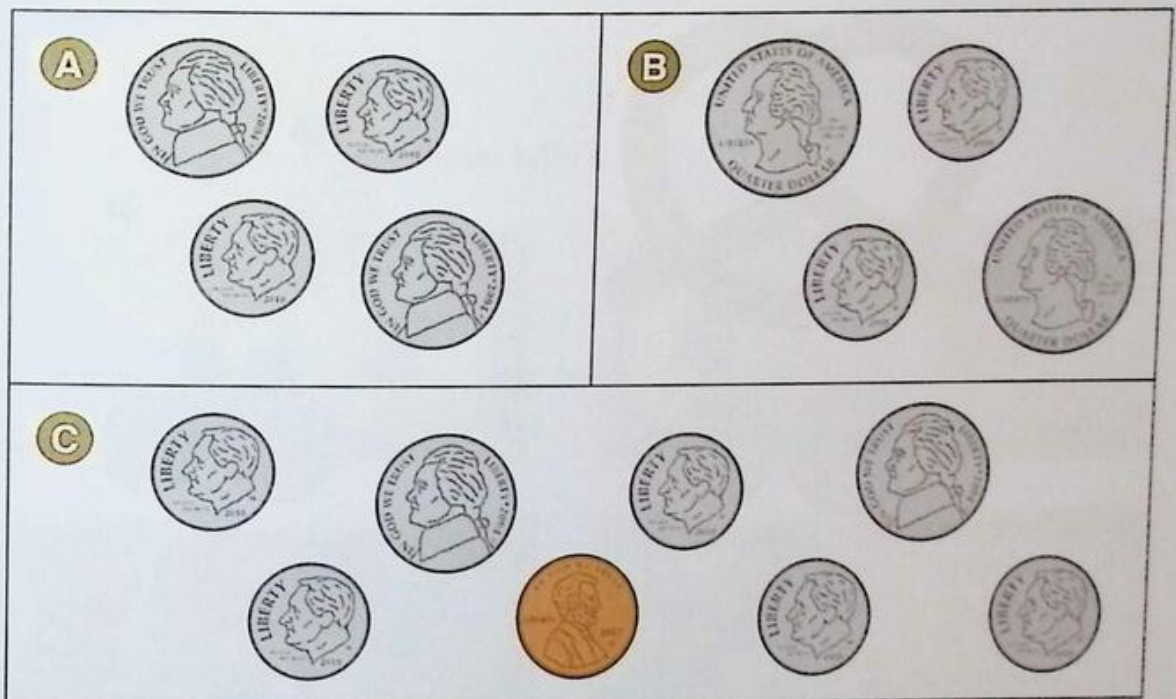


Do

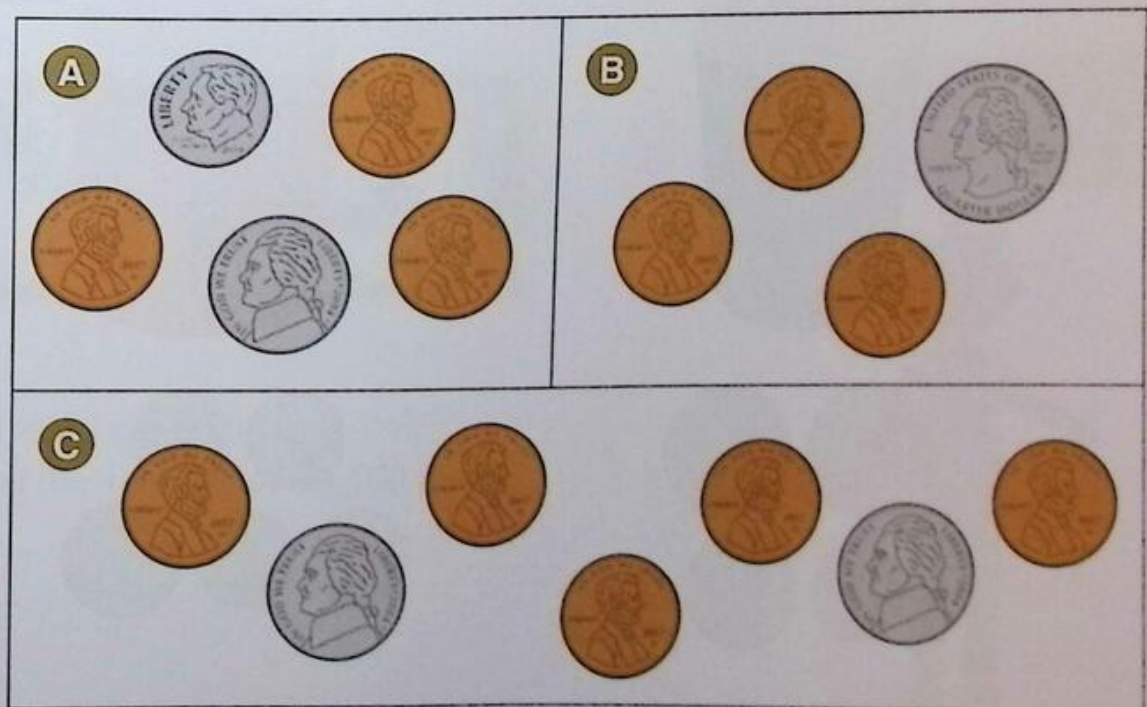
1 How much money is in each set?



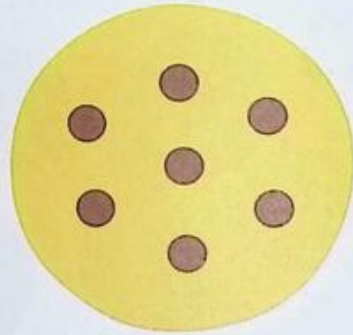
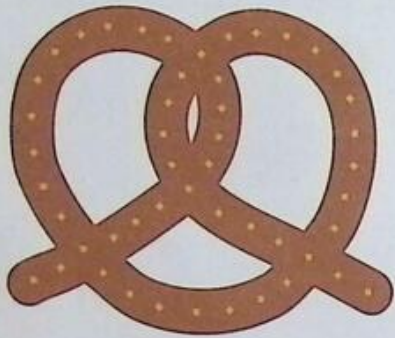
2 Which set has the most money?



3 Which set has the least money?



4 Which costs more?



5 Which costs less?



Lesson 3

Bills

3

Think

What is the value of each of these bills?



Learn



\$ means dollar.
We read \$1 as one dollar.

This is a 1-dollar bill.
It has the same value as 100 cents.





This is a 5-dollar bill.

\$5 has the same value as 1-dollar bills.



This is a 10-dollar bill.

\$10 has the same value as 5-dollar bills.



This is a 20-dollar bill.

\$20 has the same value as 10-dollar bills.

\$20 also has the same value as 5-dollar bills.

Do

① \$1 has the same value as ...

(a) pennies.

(b) nickels.

(c) dimes.

(d) quarters.

② (a) Make \$10 with bills in different ways.

(b) Make \$20 with bills in different ways.

③ How much money is in each set?

(a)



(b)





4 Which costs less?



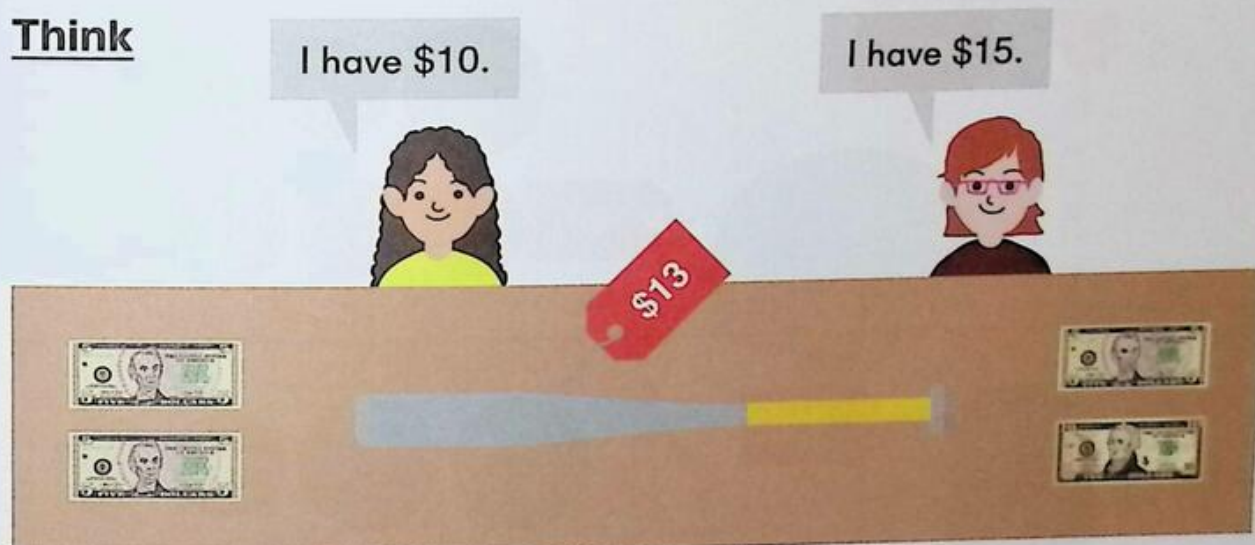
The _____ costs less.

Lesson 4

Shopping

4

Think



Who can buy the baseball bat?
How much money will she have left?
How much more money will the other friend need?

Learn



$$\$15 - \$13 = \$2$$

Emma has enough money.

She has \$ left.



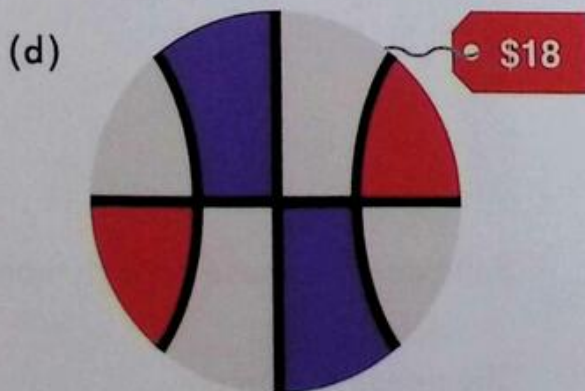
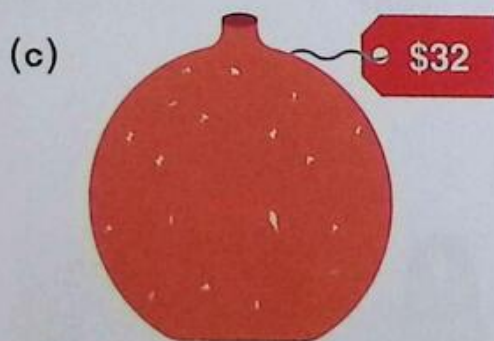
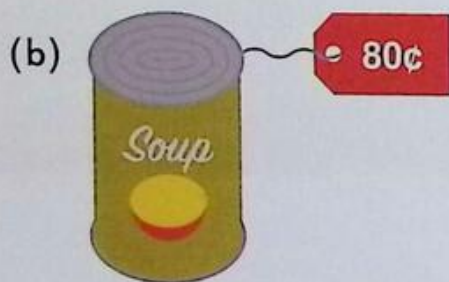
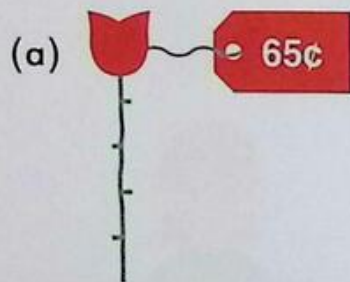
$$\begin{aligned} \$10 + ? &= \$13 \\ \$13 - \$10 &= \$3 \end{aligned}$$

Sofia does not have enough money.

She needs \$ more.

Do

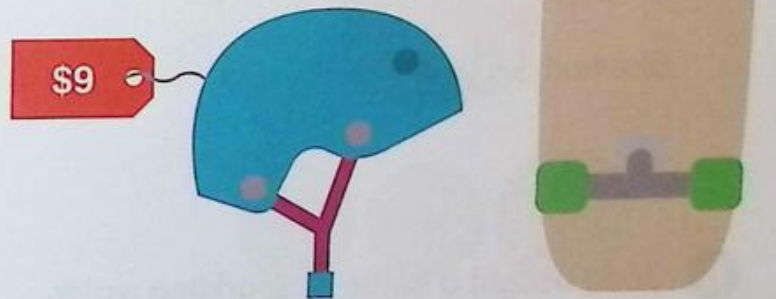
1 Is there enough money to buy the item?



- 2 Caleb wants to buy this skateboard and helmet.
How much money does he need?

$$\text{\$ } \square \bigcirc \text{\$ } \square = \text{\$ } \square$$

He needs \$ $\square$.



- 3 June pays for this with \$20.
How much will she get back?

$$\text{\$ } \square \bigcirc \text{\$ } \square = \text{\$ } \square$$

She will get \$ $\square$ back.



- 4 Mason has \$22.
How much more money does
he need to buy this?

$$\text{\$ } \square \bigcirc \text{\$ } \square = \text{\$ } \square$$

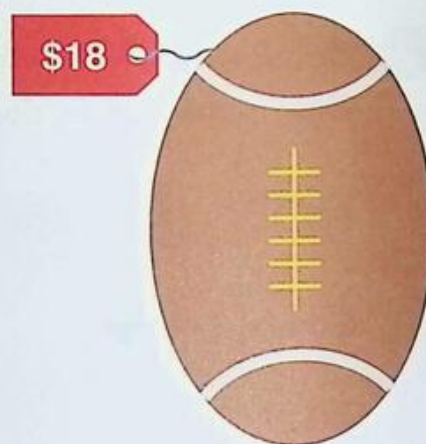
He needs \$ $\square$ more.



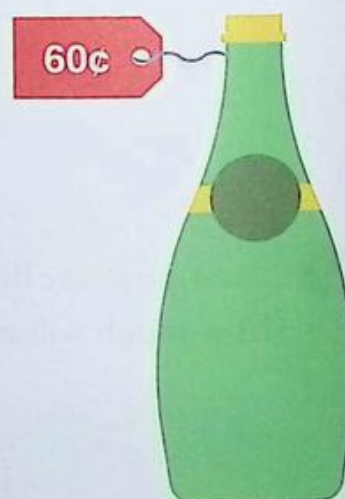
- 5 Amy bought a football.
Then she had \$7 left.
How much money did she have at first?

$$\text{\$ } \square \bigcirc \text{\$ } \square = \text{\$ } \square$$

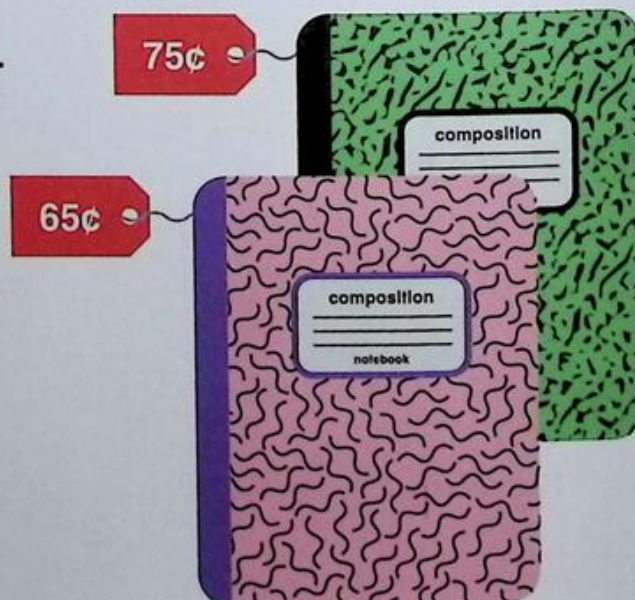
She had \$ $\square$ at first.



- 6 Jada bought a bottle of sparkling water.
She paid with 3 quarters.
How much change did she get?



- 7 Owen bought a notebook with \$1.
He received a quarter in change.
Which notebook did he buy?

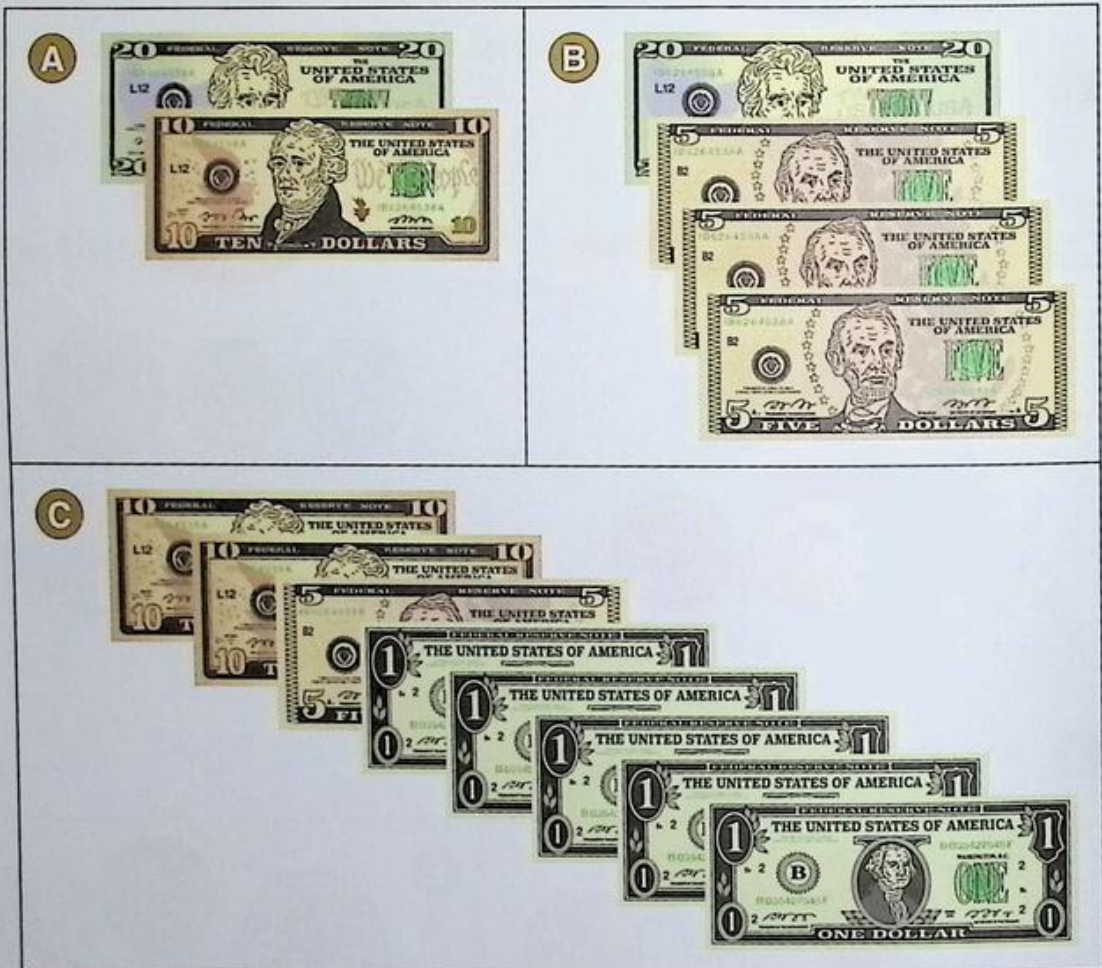


-

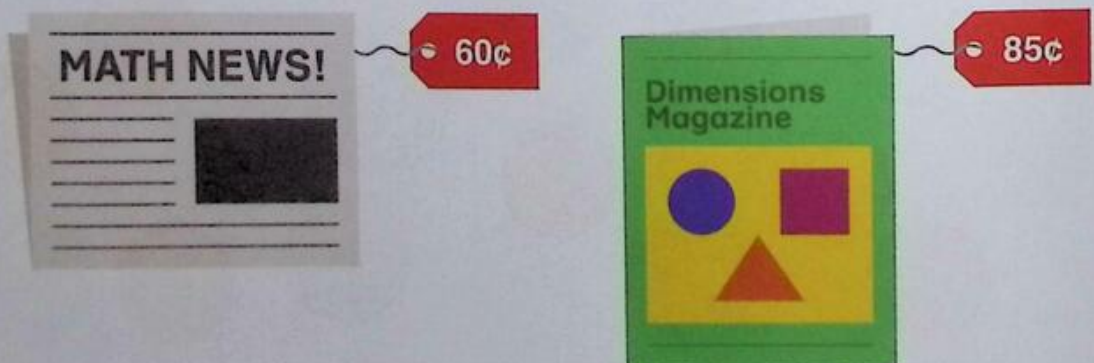


-
- Panel A shows 10 coins: 5 pennies and 5 dimes. Panel B shows 10 coins: 5 pennies and 5 dimes. The coins are arranged in a grid-like pattern.

3 Which set has the most money?



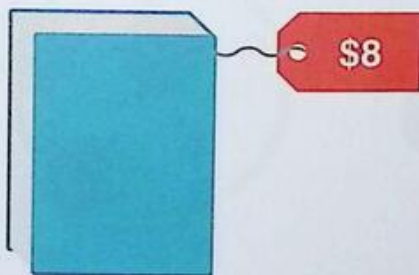
4 How much more does the magazine cost than the newspaper?



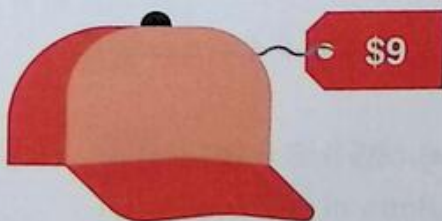
- 5 Leo bought a highlighter.
He paid \$1.
He got a nickel and a dime back.
Which highlighter did he buy?



- 6 Nolan bought this book.
He paid with a \$20 bill.
How much money did he get back?

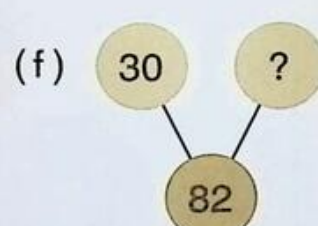
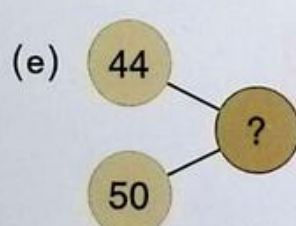
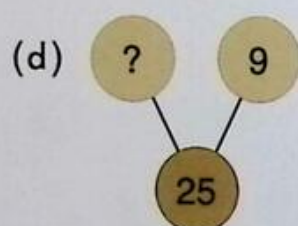
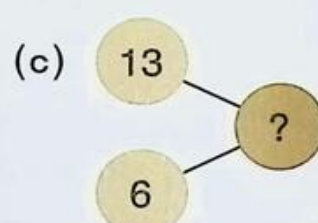
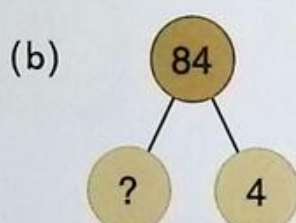
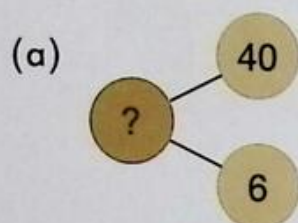


- 7 Riya had \$11 left over after buying this hat.
How much money did she have at first?



- 8 Sydney paid 3 quarters, a nickel, and a dime for a snack.
How much did the snack cost?
- 9 How many different ways can you find to make 25¢?

1 What are the missing numbers?



2 (a) $29 + 4 = \square$

(b) $38 - 2 = \square$

(c) $32 - 8 = \square$

(d) $68 + 9 = \square$

(e) $9 + 8 + 4 = \square$

(f) $4 + 4 + 4 + 4 = \square$

(g) $27 + 4 = 30 + \square$

(h) $85 + 6 = 80 + \square$

(i) $72 - 9 = 61 + \square$

(j) $65 - 7 = 60 - \square$

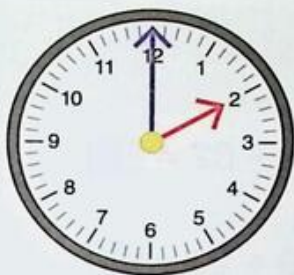
3 (a) 3 sixes is $\square$.

(b) $\square$ twos is 18.

(c) How many golf balls need to be added to have 5 fours?

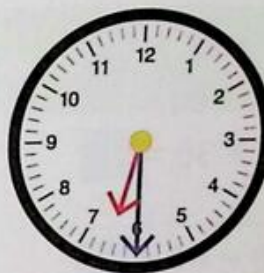


4 (a)



It is o'clock.

(b)



It is half past .

5



The minute hand is pointing to .

The hour hand is between and .

It is minutes after 4.

It is minutes before 5.

It is : .

6

(a) Divide 18 into 3 groups.

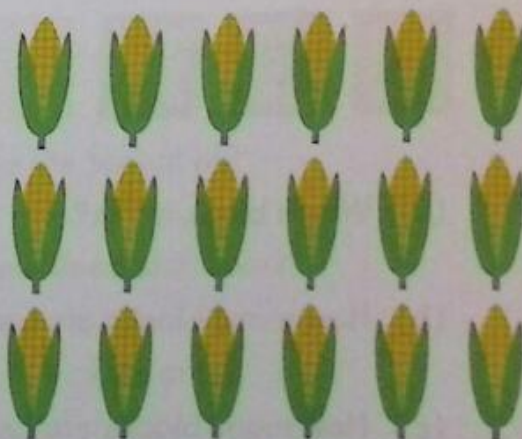
There are in each group.

(b) Divide 18 into groups of 2.

There are groups.

(c) Add a fourth group of 6.

There are now in all.



7 (a) $40 + 28 =$

(b) $68 - 40 =$

(c) $52 + 36 =$

(d) $89 - 32 =$

(e) $98 - 41 =$

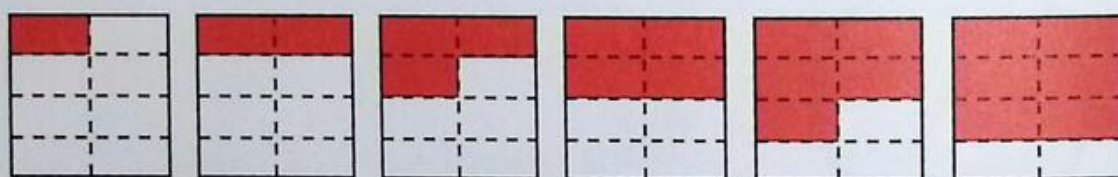
(f) $69 + 23 =$

(g) $70 - 13 =$

(h) $61 - 23 =$

1st

8



(a) The rectangle is 1 half colored.

(b) Which rectangle is 1 fourth colored?

(c) If the pattern is continued, how much of the 8th rectangle is shaded?

3rd

9



(a) Which block is 7th?

(b) How many blocks are before the 5th block?

(c) How many blocks are between the 2nd and the 6th block?

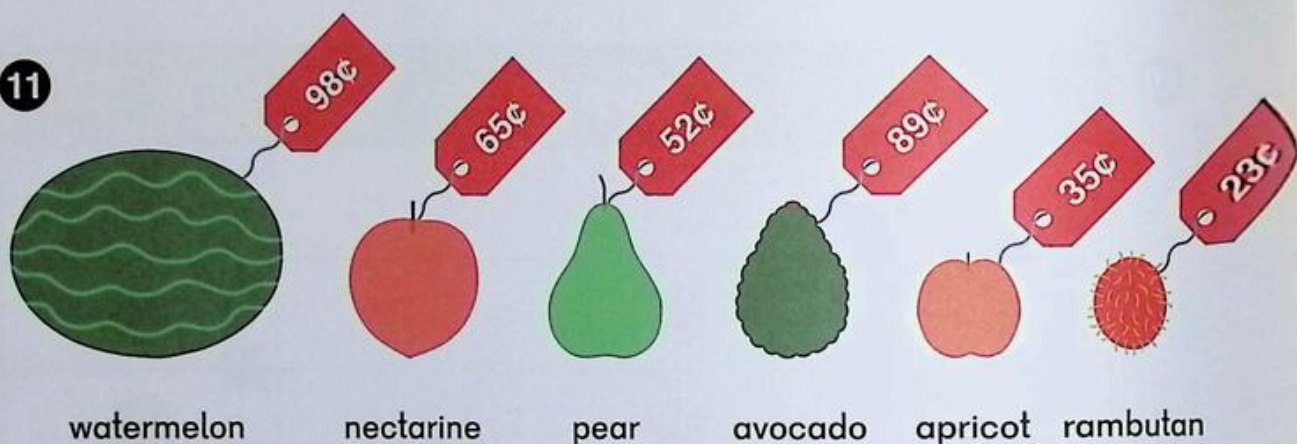
(d) If block J is the 4th from the right, how many blocks are there in all?

10

Maya's Coins			
			
			
			
			
			
			
			
			

- How many coins does Maya have?
- Which type of coin does she have the most of?
- Which type of coin does she have the fewest of?
- How many more dimes than nickels does she have?
- How much money does she have in nickels only?
- Maya spent all of her dimes and pennies on a snack.
How much did the snack cost?

11



- (a) Which fruit costs the most?
- (b) How much more does the watermelon cost than the pear?
- (c) Fang buys the rambutan and the pear.
How much money does she spend?
- (d) Josef buys 1 fruit with 2 quarters, a dime, and a nickel.
Which fruit did he buy?



- (e) Shanice buys 1 fruit with \$1 and gets 65¢ change.
Which fruit did she buy?
- (f) Clara has 5 dimes.
She wants to buy a nectarine.
How much more money does she need?
- (g) Santino buys 2 fruits with 87¢.
Which fruits did he buy?

