

Chapter

1

Fact Fluency Numbers to 1,000



1a Number Value

Fill in the blanks.

Hundreds	Tens	Ones

We can understand a number by showing the values of its parts in a place-value chart.

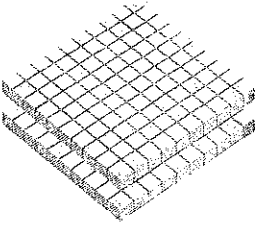
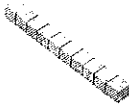



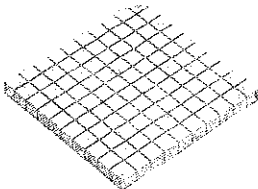
1 The value of 6 is _____.

2 The value of 2 is _____.


3 The value of 4 is _____.

4 The number is _____.

Hundreds	Tens	Ones
		

5 The value of 2  is _____.

6 The value of 1  is _____.

7 The value of 8  is _____.

8 The number is _____.



1b Number Value

Hundreds	Tens	Ones

1 The value of 4 is _____.

2 The value of 3 is _____.

3 The value of 3 is _____.

4 The number is _____.

5 = 3 tens = 3 ones

3 and 3 have different values.

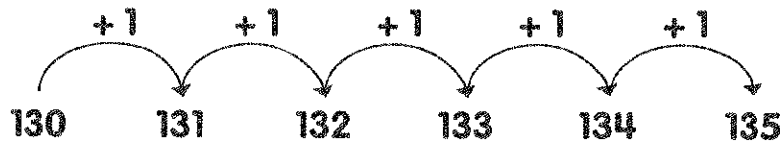
**Look at the 3s you wrote. Why do they have different values?
Use these words to help you answer the question:**

different value place value tens ones

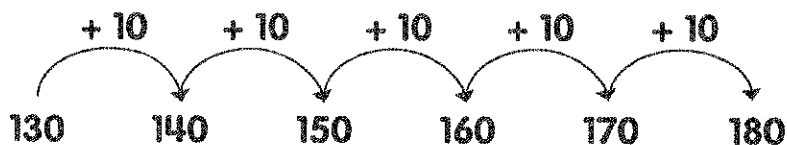
1c Counting On

Example

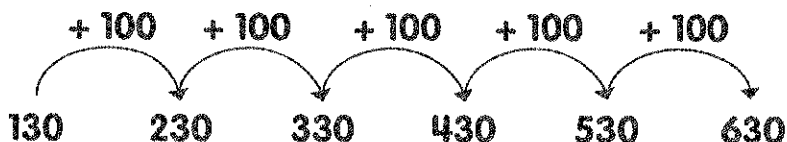
Count on by ones.



Count on by tens.



Count on by hundreds.



Understanding place value helps us count on.



Count on to fill in the blanks. Then, circle your answer to complete the sentence.

1



100, _____, _____, _____, _____, 600

I counted on by: hundreds tens ones

2



300, _____, _____, _____, _____, 350

I counted on by: hundreds tens ones

3



240, _____, _____, _____, _____, 245

I counted on by: hundreds tens ones

1d Counting On

Count on to fill in the blanks. Then, circle the digit that is different in each number.

① 641, 642, 643, _____, _____, _____, 647

Circle your answer to complete the sentence.

I counted on by: hundreds tens ones

② 360, 460, 560, _____, _____, _____, 960

Circle your answer to complete the sentence.

I counted on by: hundreds tens ones

③ 827, 837, 847, _____, _____, _____, 887

Circle your answer to complete the sentence.

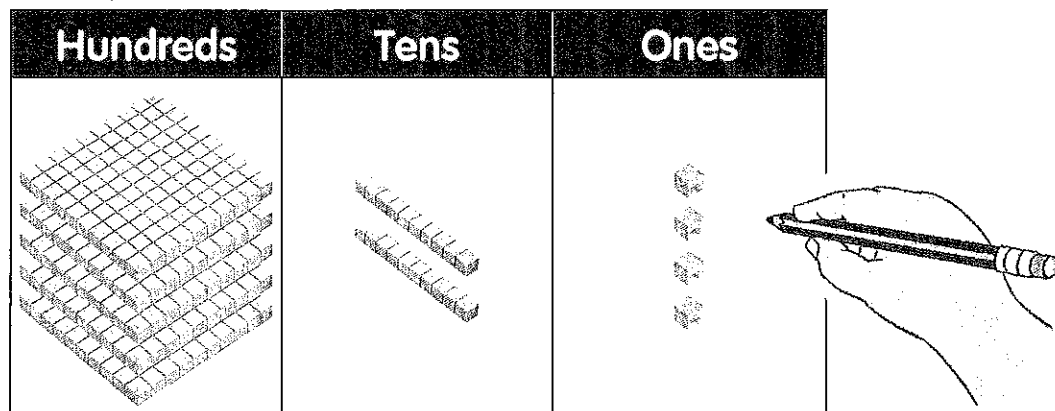
I counted on by: hundreds tens ones

How did you know what you were counting on by? Use these words to help you answer the question:

④ digit changing place value

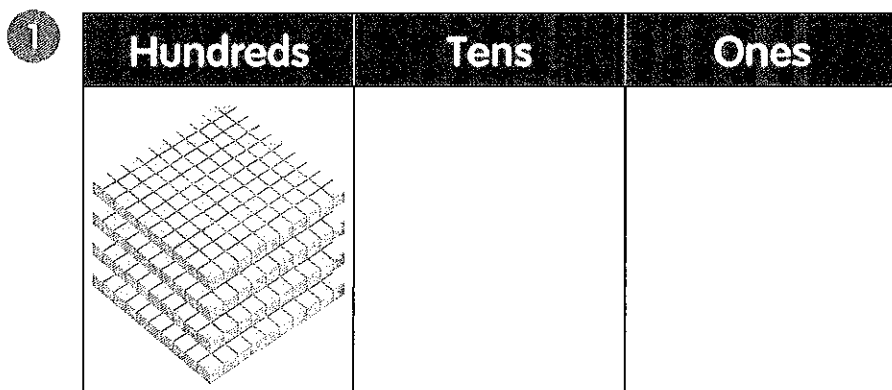
1e Drawing on a Place-Value Chart

Example

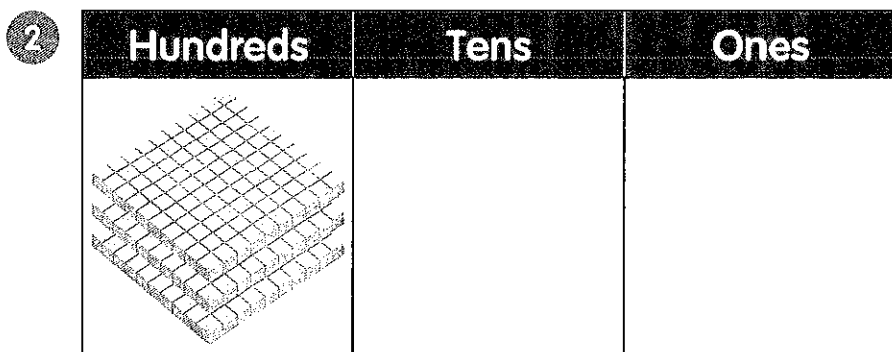


I made the number **524**.

Draw tens and ones to make a number.



I made the number _____.



I made the number _____.

1f Standard Form and Expanded Form

Example

Standard Form

246

Expanded Form

$200 + 40 + 6$

We can write numbers in expanded form to show place values.



Fill in the blanks.

① $400 + 20 + 3 =$ _____

② $500 + 30 + 7 =$ _____

③ $672 =$ _____ $+$ _____ $+$ _____

④ $388 =$ _____ $+$ _____ $+$ _____

⑤ $235 =$ _____ $+$ _____ $+$ _____

Write three numbers in standard form. Then, write them in expanded form.

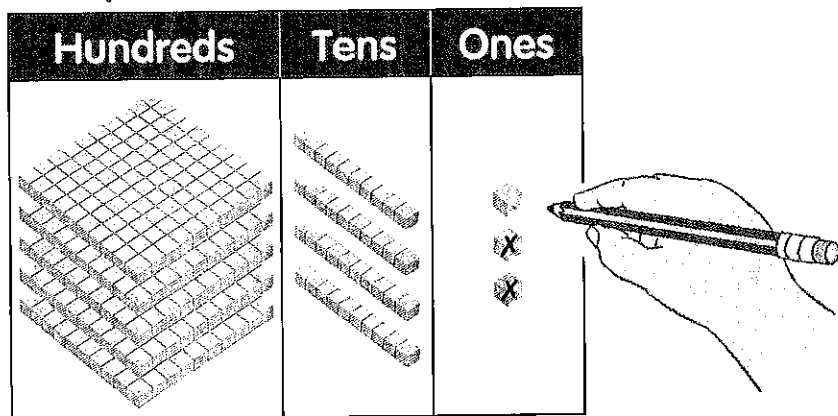
⑥ _____ $=$ _____ $+$ _____ $+$ _____

⑦ _____ $=$ _____ $+$ _____ $+$ _____

⑧ _____ $=$ _____ $+$ _____ $+$ _____

1g Counting Back

Example

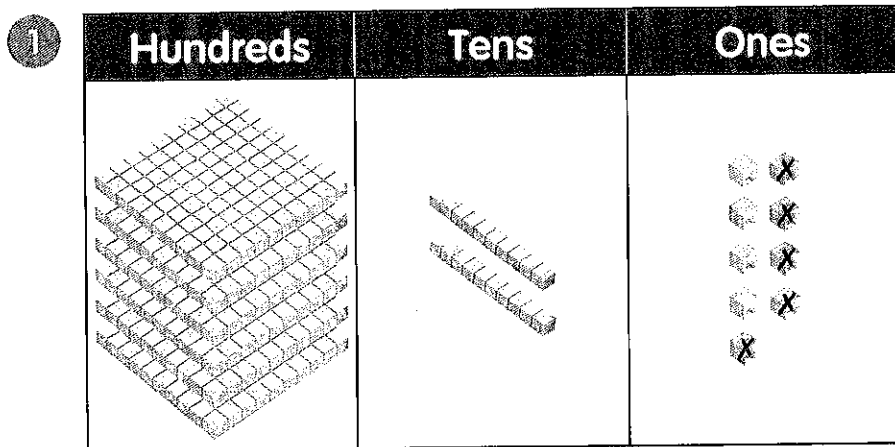


-1 -1

541, 542, 543

I counted back by ones.

Fill in the blanks. Then, circle your answer to complete the sentence.



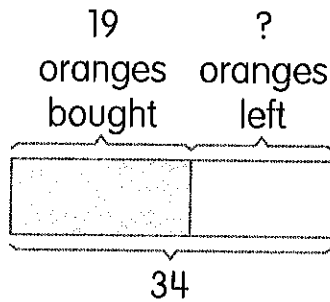
_____, _____, _____, 627, 628, 629

I counted back by: hundreds tens ones

4e Part-Part-Whole Bar Models in Subtraction

Example

There are 34 oranges for sale. A shopper buys 19 of the oranges. How many oranges are left for sale?



The whole is 34.

One part is 19.

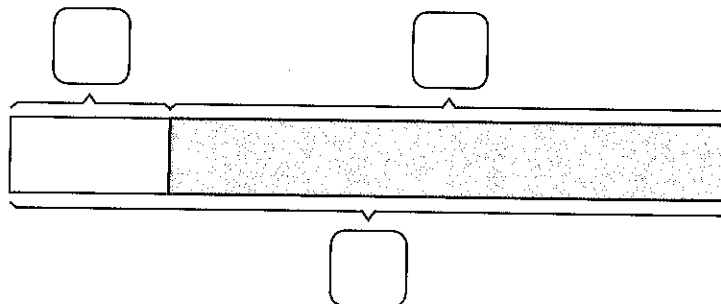
You need to subtract to find the missing part.

$$34 - 19 = 15$$

15 oranges are left for sale.

Complete the bar model. Solve. Show your work and check your answer. Then, fill in the blank.

Hannah bakes 45 loaves of bread for sale. She sells 35 loaves at the sale. How many loaves of bread are left?



My work:

_____ loaves of bread are left.

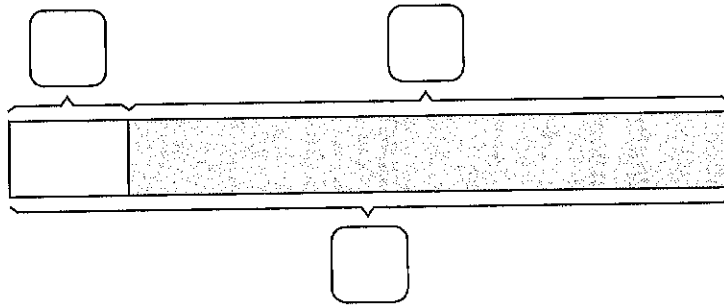


4f Part-Part-Whole Bar Models in Addition and Subtraction

Solve. Then, label the part-part-whole bar models. Each bar is a whole.

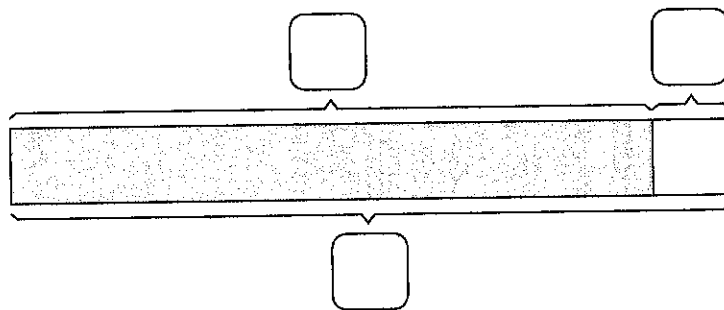
1

$$\begin{array}{r} 15 \\ + 76 \\ \hline \end{array}$$



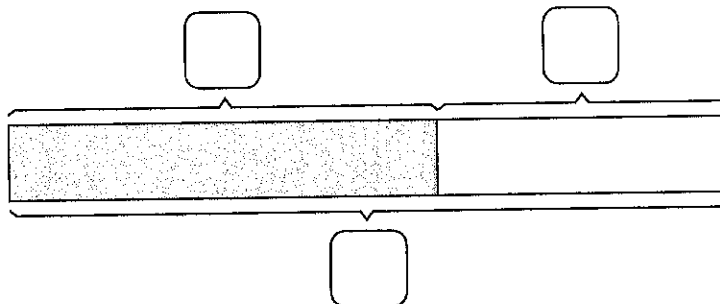
2

$$\begin{array}{r} 137 \\ + 17 \\ \hline \end{array}$$



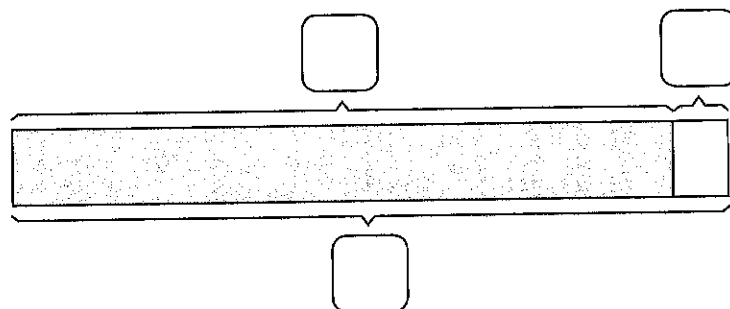
3

$$\begin{array}{r} 25 \\ - 15 \\ \hline \end{array}$$



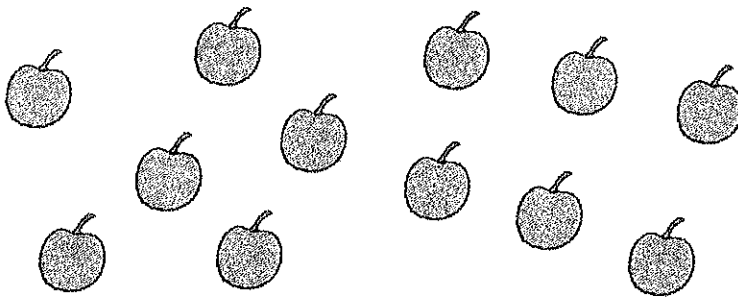
4

$$\begin{array}{r} 989 \\ - 75 \\ \hline \end{array}$$




Circle groups of 2.

5

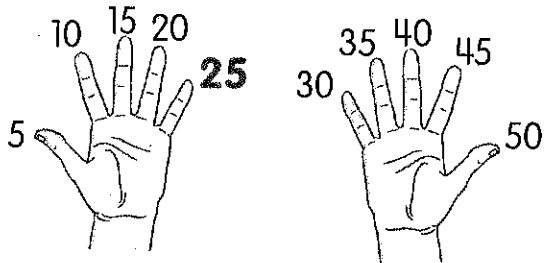


6 How many groups of  are there?

There are _____ groups of .

9c Skip-Counting by 5s and Using Dot Grids in Multiplication

Example



$$5 \times 5 = 25$$

Use your hands to help you multiply.

1 $5 \times 6 =$ _____

2 $4 \times 5 =$ _____

3 $9 \times 5 =$ _____

4 $7 \times 5 =$ _____

5 $3 \times 5 =$ _____

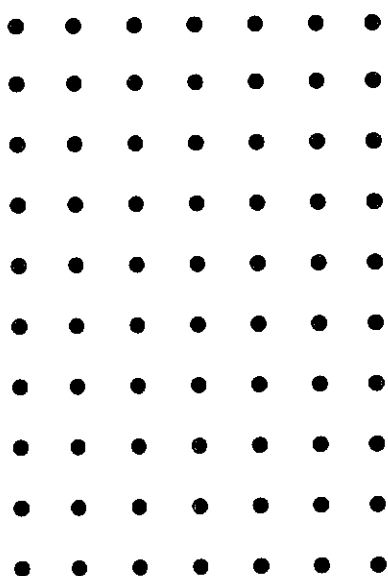
6 $5 \times 2 =$ _____

7 $8 \times 5 =$ _____

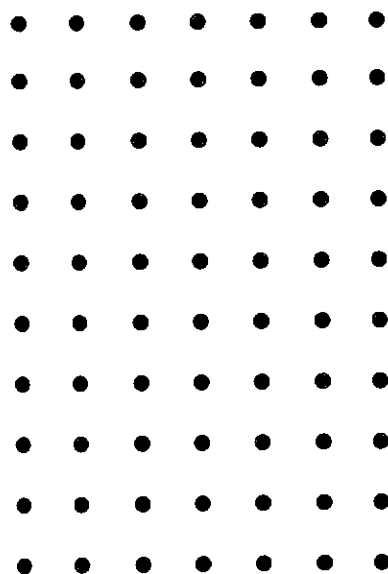
8 $5 \times 5 =$ _____

Circle groups of dots to help you multiply.

1 $7 \times 5 = \underline{\hspace{2cm}}$



2 $9 \times 5 = \underline{\hspace{2cm}}$



9d Working with 10 in Multiplication and Multiplying by 10

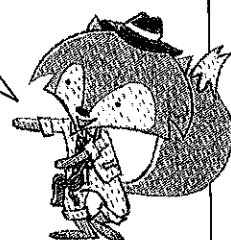
Example

7 groups of 2 = 5 groups of 2 + 2 groups of 2

5 groups of 2 is the same as 5×2 .

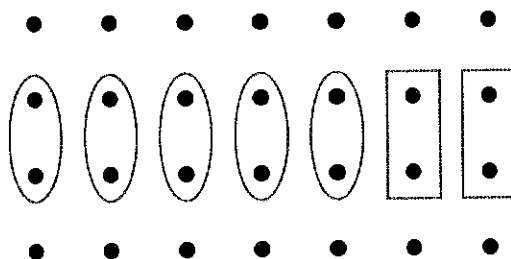
2 groups of 2 is the same as 2×2 .

You can use a dot grid to help you see ten.



$5 \times 2 + 2 \times 2$

$\downarrow \quad \downarrow$
 $10 + 4 = 14$



So, $7 \times 2 = 14$.

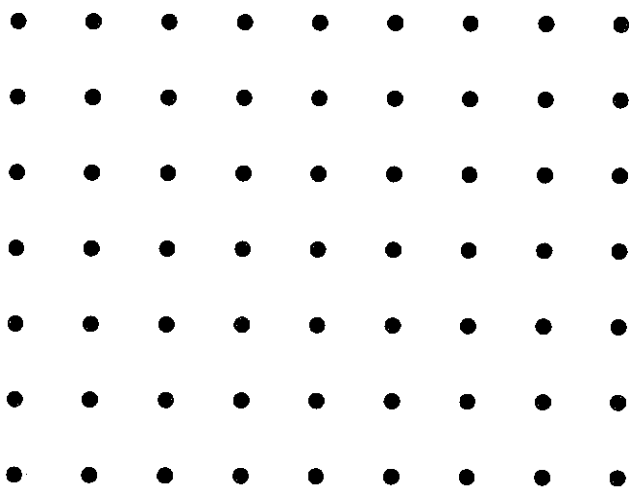
Use the dot grids to help you multiply. Circle the 2s that make up the ten. Then, box the 2s that make up the ones.

① 8 groups of 2 = 5 groups of 2 + 3 groups of 2

$$5 \times 2 = \underline{\quad\quad} + 3 \times 2 = \underline{\quad\quad}$$

$$\underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad}$$

$$8 \times 2 = \underline{\quad\quad}$$

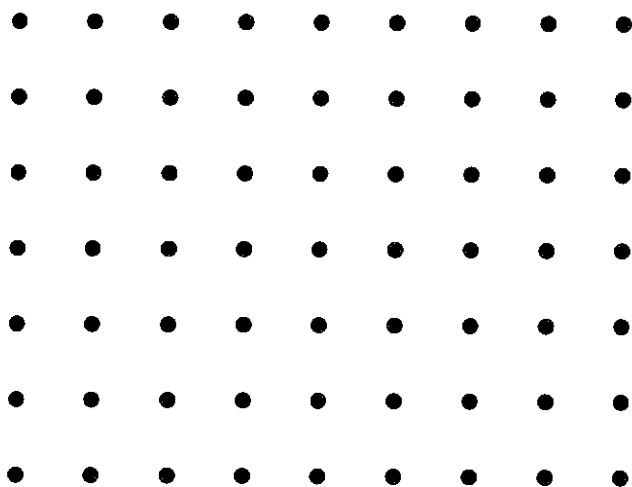


② 9 groups of 2 = 5 groups of 2 + 4 groups of 2

$$5 \times 2 = \underline{\quad\quad} + 4 \times 2 = \underline{\quad\quad}$$

$$\underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad}$$

$$9 \times 2 = \underline{\quad\quad}$$



Use the dot grid or skip-count to help you multiply by 10.

3 $10 \times \underline{\hspace{2cm}} = 50$

4 $6 \times 10 = \underline{\hspace{2cm}}$

5 $10 \times \underline{\hspace{2cm}} = 90$

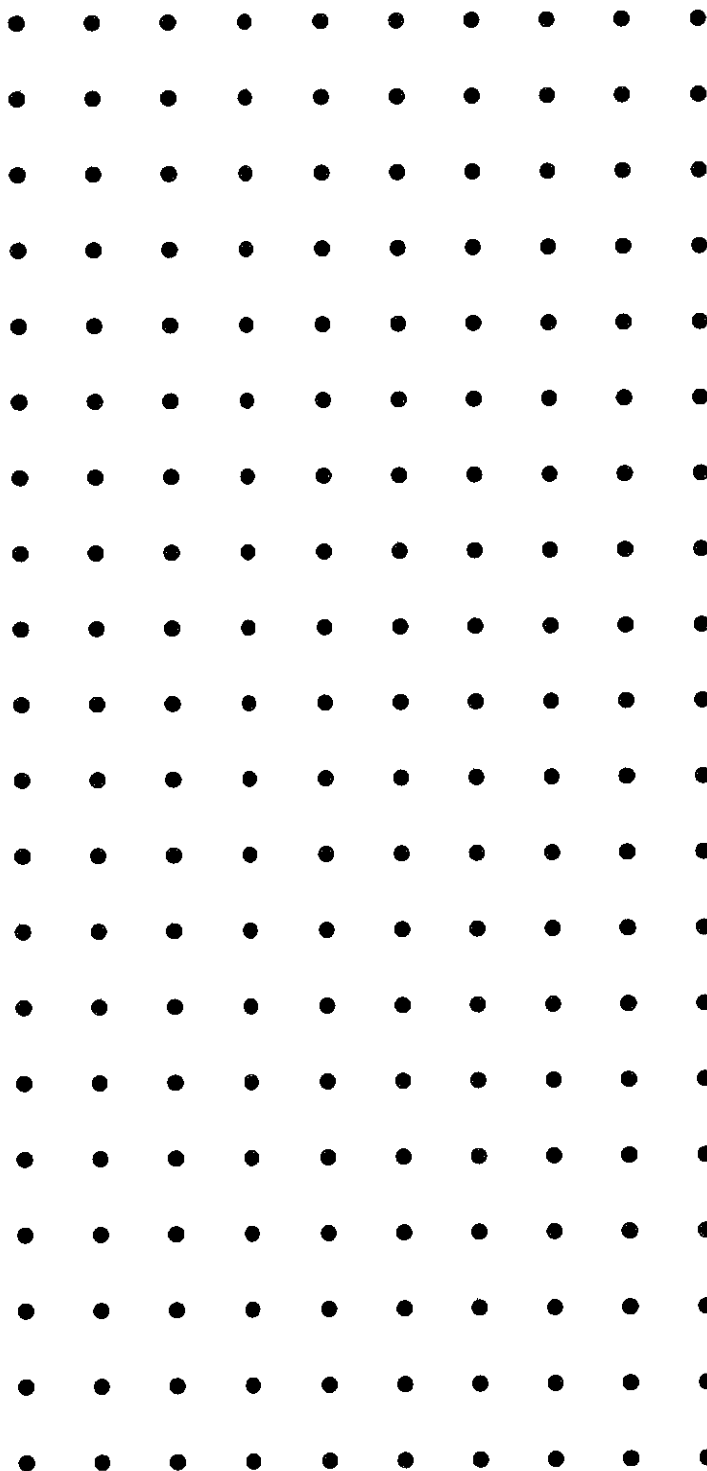
6 $4 \times 10 = \underline{\hspace{2cm}}$

7 $10 \times 3 = \underline{\hspace{2cm}}$

8 $\underline{\hspace{2cm}} \times 10 = 10$

9 $10 \times 7 = \underline{\hspace{2cm}}$

10 $10 \times \underline{\hspace{2cm}} = 20$





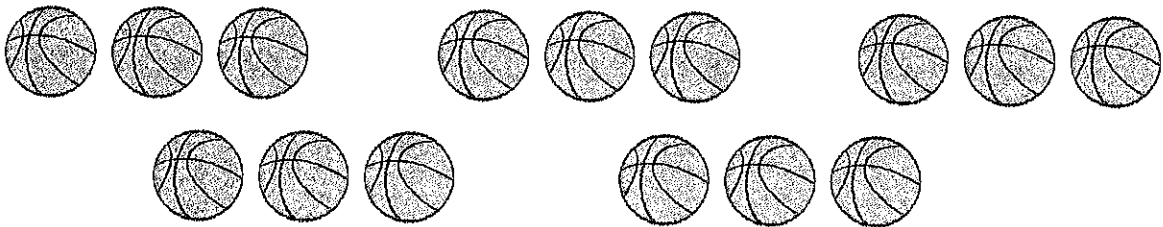
9e Drawing Equal Groups to Multiply by 3

Think of equal groups when you multiply.



Fill in the blanks.

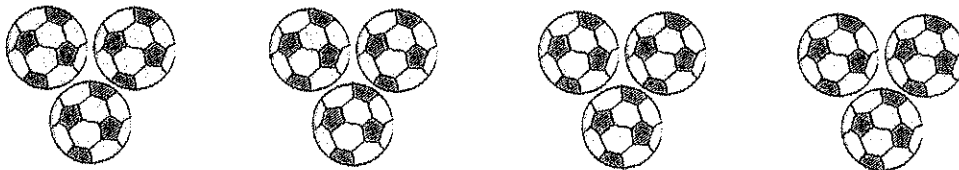
1



5 groups of 3 = _____ groups with _____ balls in each group

$$5 \times 3 = \underline{\hspace{2cm}}$$

2



4 groups of 3 = _____ groups with _____ balls in each group

$$4 \times 3 = \underline{\hspace{2cm}}$$

3



3 groups of 3 = _____ groups with _____ balls in each group

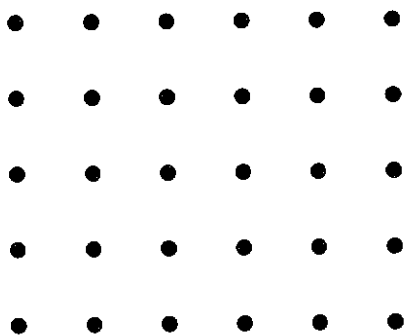
$$3 \times 3 = \underline{\hspace{2cm}}$$



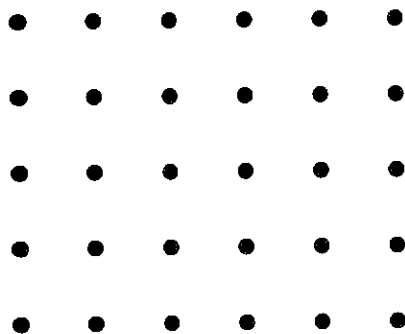
9f Using Dot Grids in Multiplication

Multiply. Use the dot grids to help you.

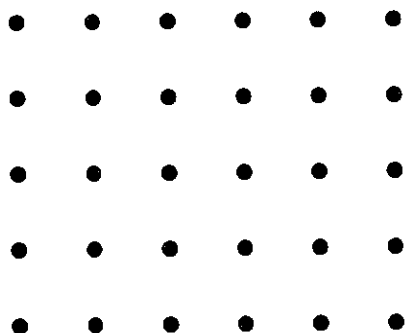
1 $4 \times 2 =$ _____



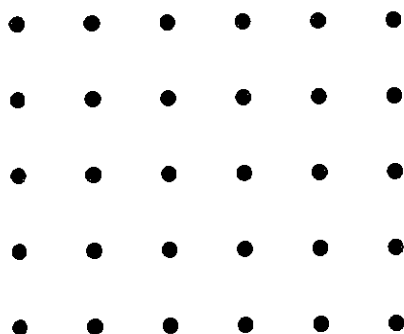
2 $2 \times 4 =$ _____



3 $3 \times 2 =$ _____



4 $2 \times 3 =$ _____



9i Multiplication and Division

Multiply or divide.

1 $2 \times 2 =$ _____

2 $1 \times 9 =$ _____

3 $0 \times 10 =$ _____

4 $6 \times 5 =$ _____

5 $8 \times 4 =$ _____

6 $45 \div 5 =$ _____

7 $32 \div 4 =$ _____

8 $4 \div 4 =$ _____

9 $12 \div 2 =$ _____

10 $21 \div 3 =$ _____

11 $0 \div 3 =$ _____

12 $30 \div 5 =$ _____

9j Multiplication and Division

Multiply or divide.

1 $5 \times 4 =$ _____

2 $2 \times 3 =$ _____

3 $3 \times 5 =$ _____

4 $10 \times 2 =$ _____

5 $4 \times 3 =$ _____

6 $25 \div 5 =$ _____

7 $9 \div 3 =$ _____

8 $12 \div 3 =$ _____

9 $16 \div 4 =$ _____

10 $8 \div 2 =$ _____



9k Related Multiplication and Division Facts

Write a multiplication fact and a related division fact.

1

Multiplication fact: _____ \times _____ = _____

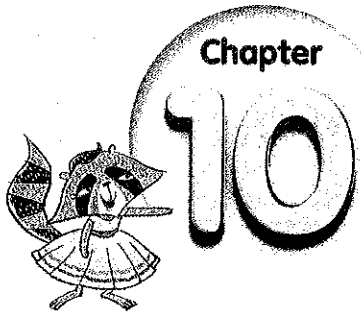
2

Related division fact: _____ \div _____ = _____

How does knowing related facts help you solve a multiplication or division problem? Use these words to help you answer the question. Draw a picture to go with your answer.

3

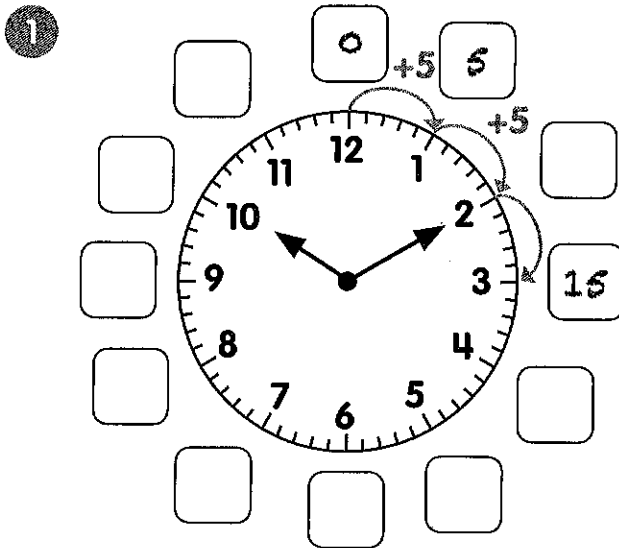
solve multiplication division groups same



Fact Fluency Time and Money

10a Skip-Counting by 5s on a Clock

Skip-count by 5s. Write the numbers to match the minute marks on the clock.



You can skip-count by 5s to help you tell the time.



2 How many minutes are there in 1 hour? _____

10b Skip-Counting by 5s

How does skip-counting by 5s help you tell the time? Use these words to help you answer the question:

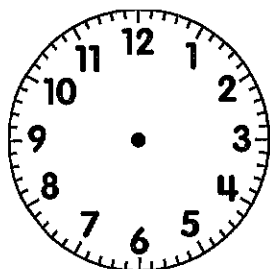
multiply skip-count numbers minutes represent
five time



10c Counting On or Counting Back to the Hour

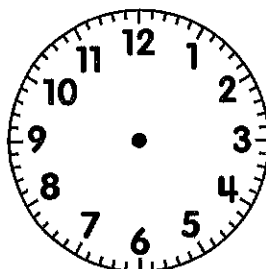
Count on or count back to draw the hour and minute hands.

- 1 1 hour after 12:00



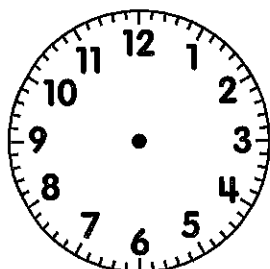
Time: _____

- 2 2 hours after 4:00



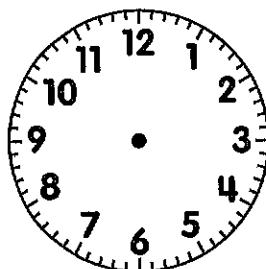
Time: _____

- 3 1 hour before 12:00



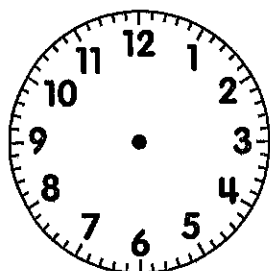
Time: _____

- 4 2 hours before 7:00



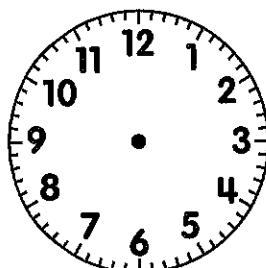
Time: _____

- 5 1 hour after 10:00



Time: _____

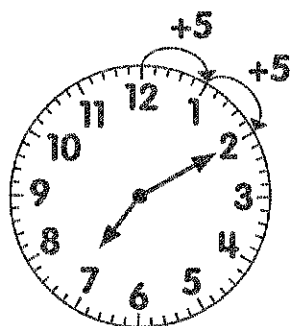
- 6 2 hours before 3:00



Time: _____

10d Counting On or Counting Back to the Half-Hour

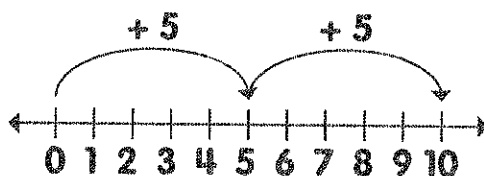
Example



The shorter hand points a little after 7.

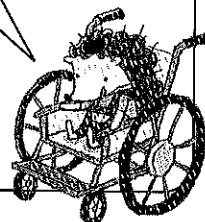
The longer hand points at 2.

Skip-counting by 5s gives 10:



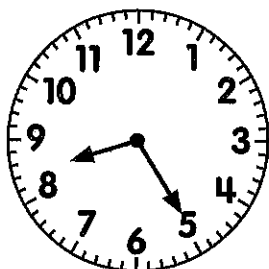
So, the time is **7:10**.

A clock's shorter hand shows the hour. Its longer hand shows the minute.



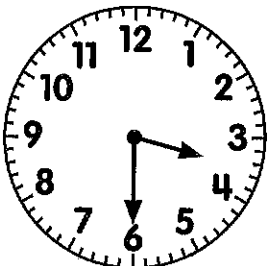
Write the hour. Then, skip-count by 5s to write the minute.

1



Time: _____

2

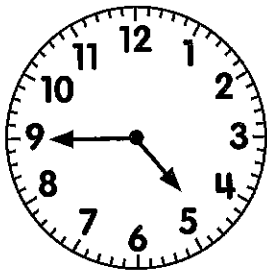


Time: _____

10e Counting On or Counting Back to the Half-Hour

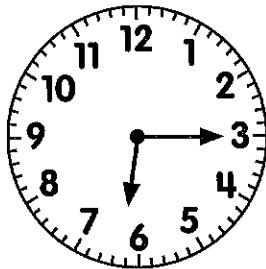
Write the hour. Then, skip-count by 5s to write the minute.

1



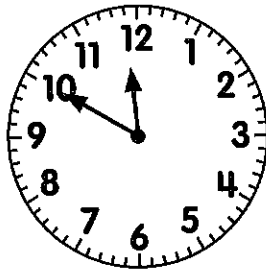
Time: _____

2



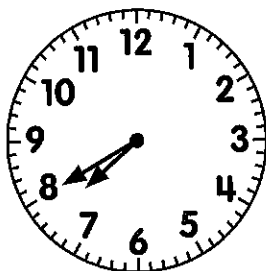
Time: _____

3



Time: _____

4

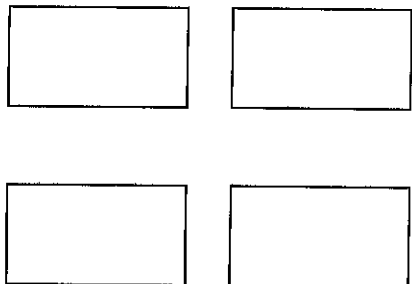


Time: _____

11d Groups of Sides

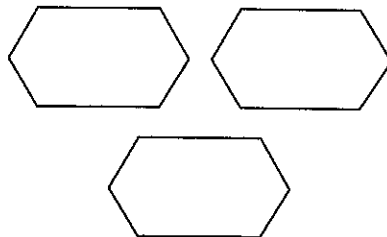
Count the shapes. Then, count the sides of each shape. How many sides are there in all?

1



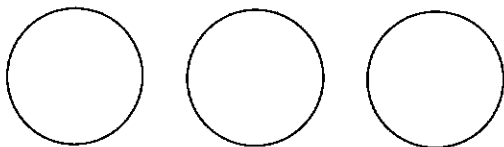
$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \text{ sides}$$

2



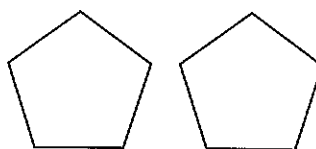
$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \text{ sides}$$

3



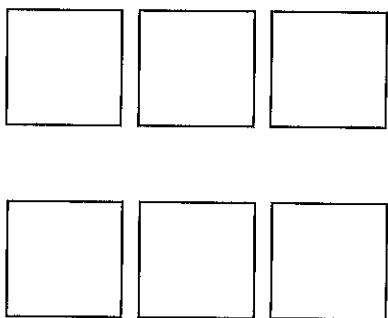
$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \text{ sides}$$

4



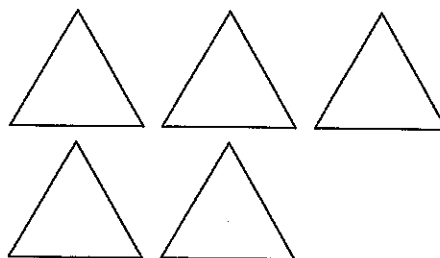
$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \text{ sides}$$

5



$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \text{ sides}$$

6

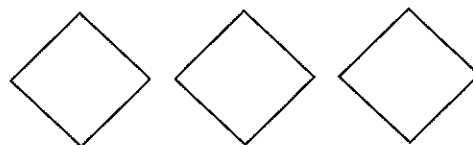
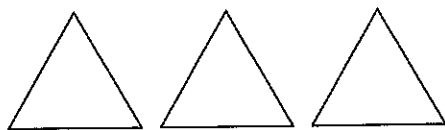


$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \text{ sides}$$

11e Groups of Corners

Count the shapes. Then, count the corners on each shape. How many corners are there in all?

1



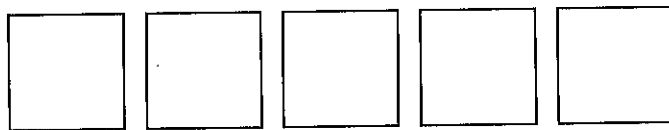
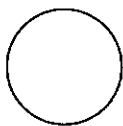
$$\underline{\quad} \times \underline{\quad} = \underline{\quad} + \underline{\quad} \times \underline{\quad} = \underline{\quad}$$

So, $\underline{\quad} + \underline{\quad} = \underline{\quad}$.

There are $\underline{\quad}$ corners in all.



2



$$\underline{\quad} \times \underline{\quad} = \underline{\quad} + \underline{\quad} \times \underline{\quad} = \underline{\quad}$$

So, $\underline{\quad} + \underline{\quad} = \underline{\quad}$.

There are $\underline{\quad}$ corners in all.

3



$$\underline{\quad} \times \underline{\quad} = \underline{\quad} + \underline{\quad} \times \underline{\quad} = \underline{\quad}$$

So, $\underline{\quad} + \underline{\quad} = \underline{\quad}$.

There are $\underline{\quad}$ corners in all.