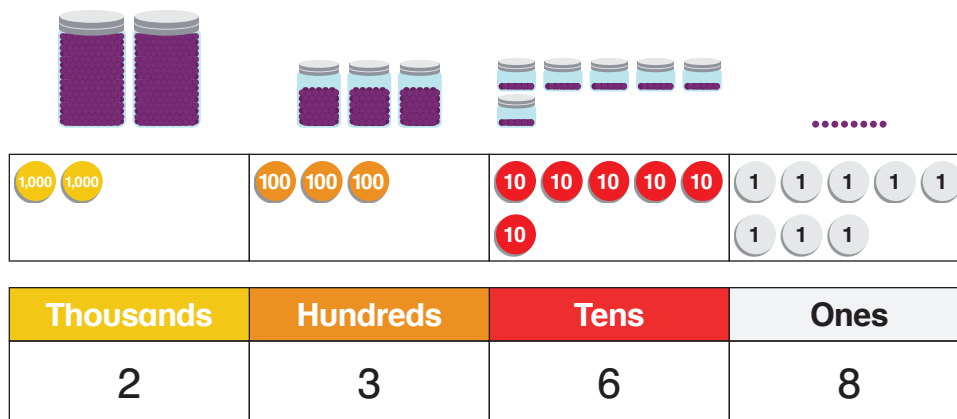


### Think

How many beads do I have altogether?



## Learn



$$2,000 + 300 + 60 + 8 = \square$$

Dion has  $\square$  beads.

2,000

The digit 2 in 2,368 is in the thousands place.  
It stands for 2 thousands.  
Its value is 2,000.

300

The digit 3 in 2,368 is in the hundreds place.  
It stands for 3 hundreds.  
Its value is  $\square$ .

60

The digit 6 in 2,368 is in the tens place.  
It stands for  $\square$  tens.  
Its value is 60.

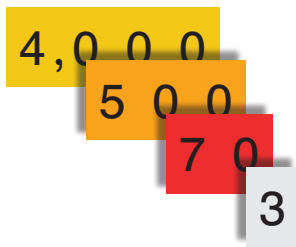
8

The digit 8 in 2,368 is in the ones place.  
It stands for 8 \_\_\_\_\_.  
Its value is  $\square$ .

2,368

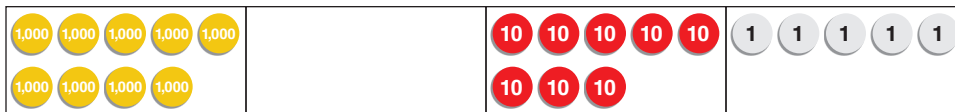
## Do

- 1 Show 4,573 with place-value cards.



- (a) The digit 4 in 4,573 is in the \_\_\_\_\_ place.
- (b) The digit 5 in 4,573 stands for 5 \_\_\_\_\_.
- (c) The digit 7 in 4,573 stands for 7 \_\_\_\_\_.
- (d) The digit 3 in 4,573 is in the \_\_\_\_\_ place.

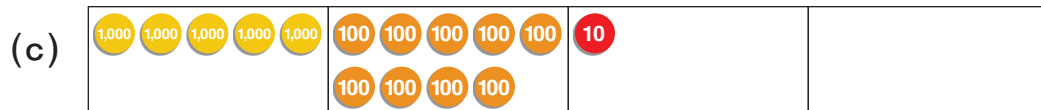
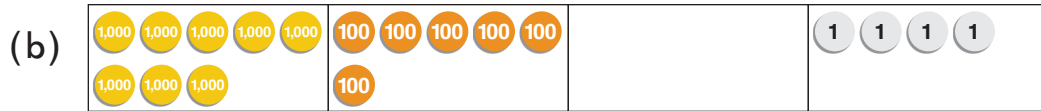
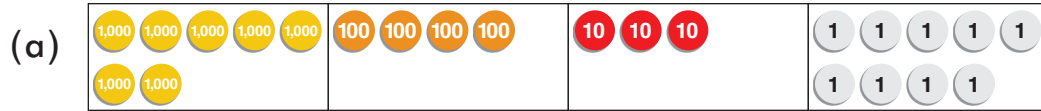
2



Thousands	Hundreds	Tens	Ones
9	0	8	5

- (a) The digit   in 9,085 is in the ones place.
- (b) The digit 0 in 9,085 is in the \_\_\_\_\_ place. Its value is 0.
- (c) The value of the digit 9 in 9,085 is  .
- (d) The digit   in 9,085 stands for   tens.

**3** Write the number.



**4** (a) Write the number in words.

**4,982**    **2,308**    **9,250**    **5,029**

(b) In what place is the digit 2 in each number, and what is its value?

**5** (a)  $6,069 = 6,000 + \square + 9$

(b)  $7,402 = 7,000 + 400 + \square$

(c)  $5,300 = \square + 300$

(d)  $5,008 = 5,000 + \square$

(e)  $1,953 = \square + 1,000 + 3 + 50$

(f)  $8,808 = 8 + \square + 8,000$

# Lesson 9

## 2-Step Word Problems

9

### Think

Mei had 30 m of ribbon.

She cut off 2 pieces of ribbon.

The second piece is 3 times as long as the first piece.

There is still 18 m of ribbon left on the spool.

How long is each piece?

### Learn

I need to find the total length of the two cut pieces first.

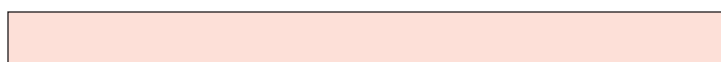
first piece



second piece



left on spool



18

30



$$4 \text{ units} \rightarrow 30 - 18 = 12$$

$$1 \text{ unit} \rightarrow 12 \div 4 = 3$$

The first piece is  m long.

$$3 \text{ units} \rightarrow 3 \times 3 = $$

The second piece is  m long.

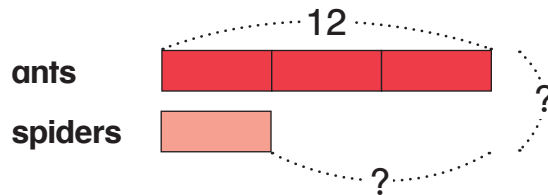
Check your answers.  
Does  $3 + 9 + 18 = 30$ ?



## Do

- 1 Mei made 3 times as many ants as spiders.  
She made 12 ants.

- (a) How many animals did she make?
- (b) How many more ants than spiders did she make?



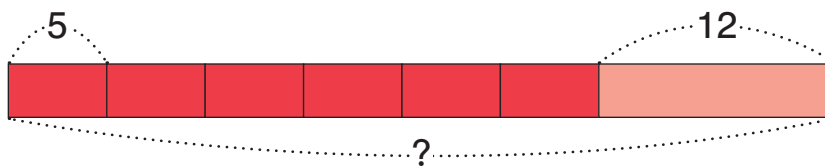
$$3 \text{ units} \rightarrow 12$$
$$1 \text{ unit} \rightarrow 12 \div 3 = 4$$

Find the value  
of 1 unit first  
and use that for  
both problems.



- (a) 4 units  $\rightarrow 4 \times \square = \square$  | She made  $\square$  animals.
- (b) 2 units  $\rightarrow 2 \times \square = \square$  | She made  $\square$  more ants than spiders.

- 2 Ms. Davis bought 6 skeins of wool yarn for \$5 each and a set of knitting needles for \$12.  
How much did she spend?

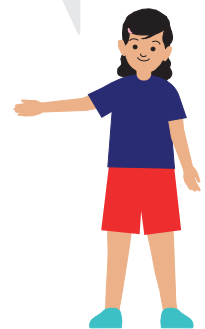


$$1 \text{ unit} \rightarrow 5$$
$$6 \text{ units} \rightarrow 6 \times \square = \square \text{ (cost of yarn)}$$

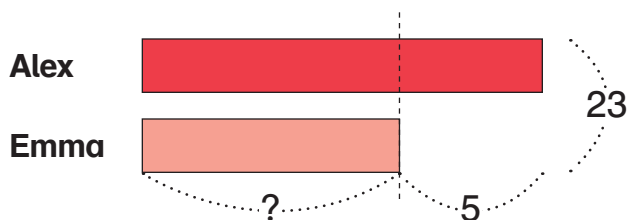
$$\square + 12 = \square \text{ (total spent)}$$

She spent \$  $\square$  .

Find the cost of  
the yarn first.

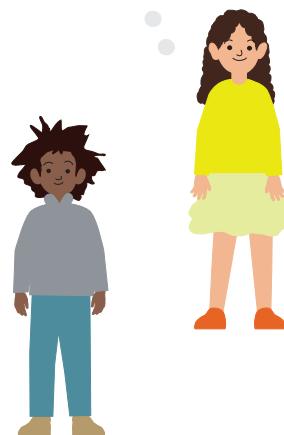


- 3** Alex and Emma together made 23 dinosaurs.  
Alex made 5 more dinosaurs than Emma.  
How many dinosaurs did Emma make?



If I take 5 away,  
they will both have  
the same number.

We need to find how many Emma made.  
Make her bar the unit.

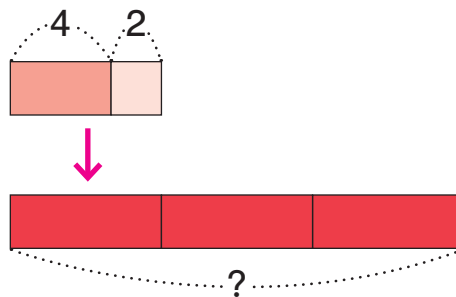


2 units  $\rightarrow 23 - 5 = 18$

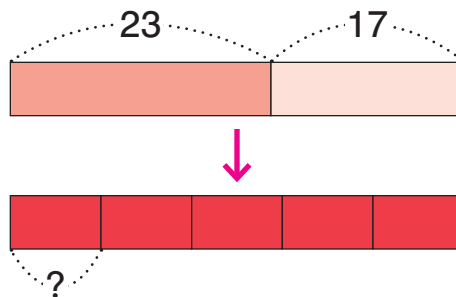
1 unit  $\rightarrow 18 \div 2 =$   

Emma made   dinosaurs.

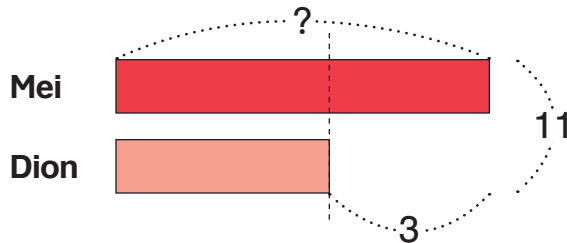
- 4** Dexter bought 3 packs of foam brushes.  
There were 4 thin brushes and 2 thick  
brushes in each pack.  
How many brushes did he buy?



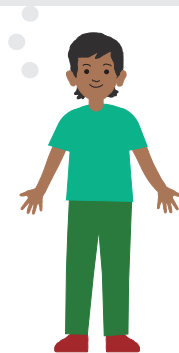
- 5** Sita polished 23 rocks on Monday  
and 17 rocks on Tuesday.  
She put the rocks equally into 5 boxes.  
How many rocks are in each box?



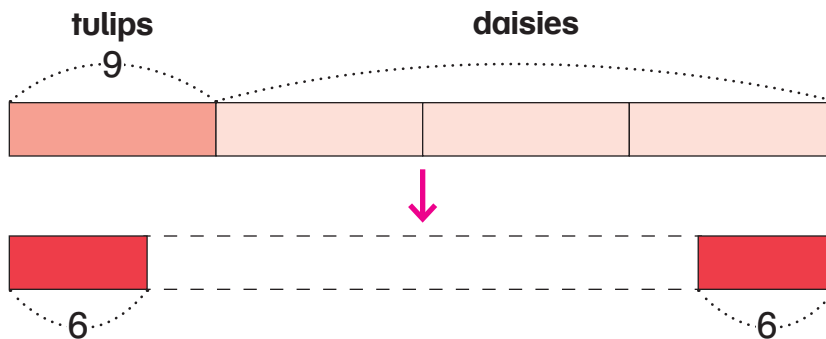
- 6 Mei and Dion together made 11 turtles.  
Mei made 3 more turtles than Dion.  
How many turtles did Mei make?



Make Mei's bar the unit.  
If Dion had made 3 more  
then...



- 7 Asimah has 9 tulips.  
She has 3 times as many daisies as tulips.  
She arranges 6 flowers in each vase.  
How many vases does she use?



- 8 A pack of 5 paint pens cost \$3.  
Mr. Ikeda bought 20 paint pens.  
How much did he pay?
- 9 Hudson has 4 times as many crayons as Elena.  
He has 24 more crayons than Elena does.  
How many crayons do they have altogether?



**1** Find the value.

(a)  $8 \div 4$

(b)  $4 \times 7$

(c)  $14 \div 2$

(d)  $4 \times 4$

(e)  $32 \div 4$

(f)  $0 \times 10$

(g)  $35 \div 5$

(h)  $27 \div 3$

(i)  $18 \div 3$

(j)  $16 \div 2$

(k)  $5 \div 5$

(l)  $0 \div 10$

**2** (a)  $5 \times \square = 20$       (b)  $\square \times 5 = 0$       (c)  $\square = 8 \times 3$

(d)  $3 \div \square = 3$       (e)  $\square \div 5 = 0$       (f)  $\square = 4 \div 2$

**3** Find the quotient and remainder.

(a)  $7 \div 2$

(b)  $10 \div 3$

(c)  $22 \div 4$

(d)  $16 \div 5$

(e)  $42 \div 10$

(f)  $88 \div 10$

(g)  $26 \div 3$

(h)  $26 \div 4$

(i)  $26 \div 5$

**4** Are the following numbers odd or even?

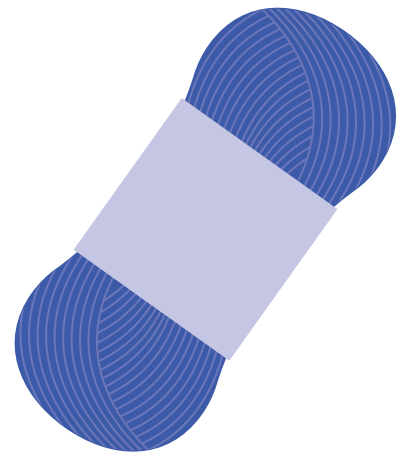
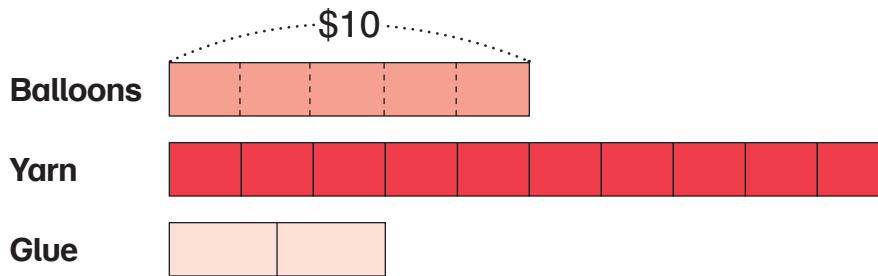
(a) 12

(b) 11

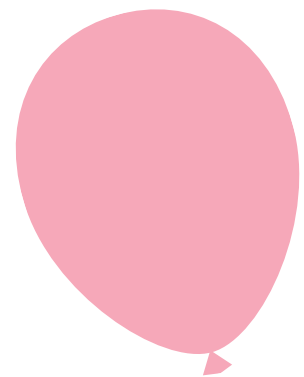
(c) 13

(d) 16

- 5** Katie is making decorative balls out of yarn to sell at the farmer's market on Kids Vending Day. She bought 1 pack of balloons, 10 skeins of yarn, and 2 bottles of glue. She spent \$10 on the pack of balloons. The balloons cost 5 times as much as 1 skein of yarn. The 2 bottles of glue cost the same as 3 skeins of yarn.



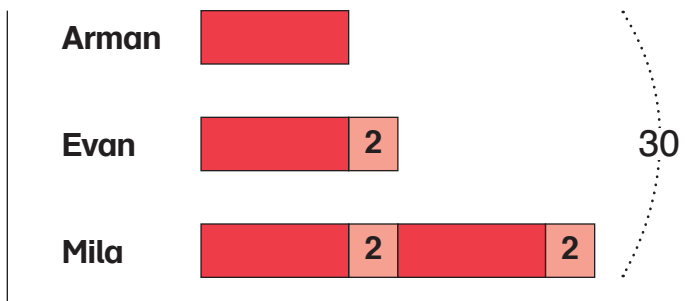
- (a) How much does 1 skein of yarn cost?
- (b) How much did she spend on the yarn?
- (c) How much does 1 bottle of glue cost?
- (d) How much did she spend in all?
- (e) Katie made 9 each of red, yellow, orange, and green balls. She made 4 brown balls. She displayed the balls by putting 5 in each bowl. How many bowls did she use?
- (f) She sold all 9 red balls. One buyer gave her \$1 extra as a tip. She received \$28 from selling the red balls. How much did she sell each red ball for?



**6** Josef made a total of 5 birdhouses and sold them all for \$9 each at the market on Kids Vending Day.

- (a) How much money did he receive?
- (b) The materials for each birdhouse cost \$3.  
The fee for the booth at the market was \$5.  
How much did he spend?
- (c) How much profit did he make?

**7** Evan collected 2 more pinecones than Arman. Mila collected twice as many pinecones as Evan. Altogether, they collected 30 pinecones.



- (a) How many pinecones did Arman collect?
- (b) How many pinecones did Mila collect?

**8** Alisha collected 3 more pinecones than Fuyu. Lucas collected 3 times as many pinecones as Alisha. Altogether, they collected 47 pinecones.

- (a) How many pinecones did Fuyu collect?
- (b) How many pinecones did Lucas collect?

# Lesson 4

## Multiplication with Regrouping Ones

4

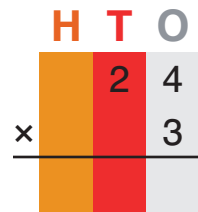
### Think



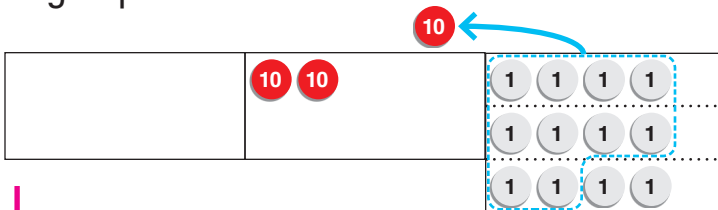
Mei ran 24 miles each week for 3 weeks to prepare for the race.  
How many miles did she run to prepare for the race?

### Learn

$$24 \times 3$$



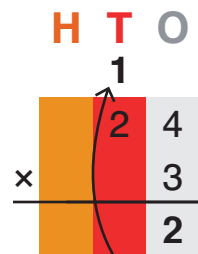
Multiply the ones.  
Regroup the ones.



$$4 \text{ ones} \times 3 = 12 \text{ ones}$$

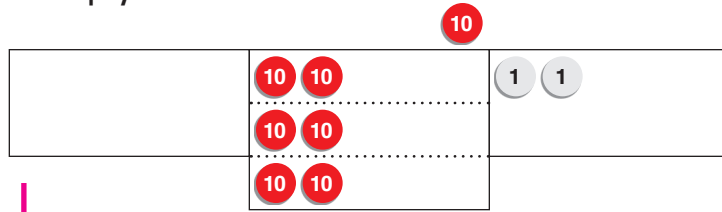
$$= 1 \text{ ten } 2 \text{ ones}$$

Write the regrouped ten above the tens.



$$4 \text{ ones} \times 3$$

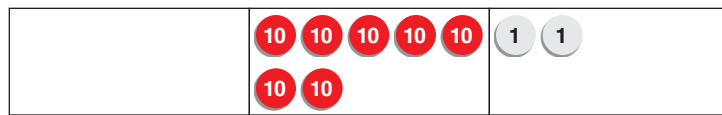
Multiply the tens.



$$2 \text{ tens} \times 3 = 6 \text{ tens}$$

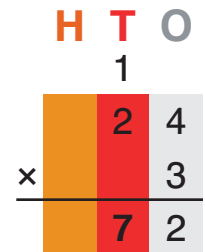
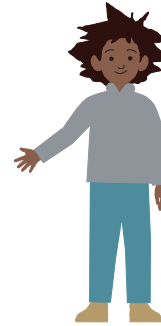


Then, add in the regrouped ten.



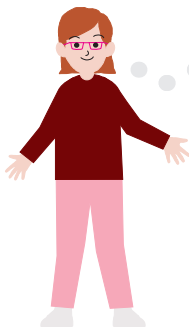
$$6 \text{ tens} + 1 \text{ ten} = 7 \text{ tens}$$

This ten is from multiplying the ones. Do not multiply it again.



↑  
(2 tens × 3) + 1 ten

$$\begin{array}{r} 24 \\ \times 3 \\ \hline \end{array}$$



$$\begin{array}{r} 24 \\ \times 3 \\ \hline 12 \\ 60 \\ \hline 72 \end{array}$$

← 4 × 3

← 20 × 3

I can use mental math.

$$24 \times 3 = 60 + 12$$

/ \

20 4

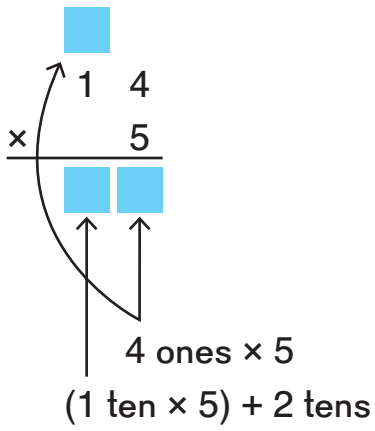


Mei ran   miles.

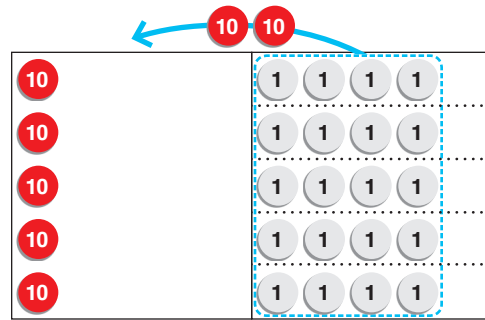
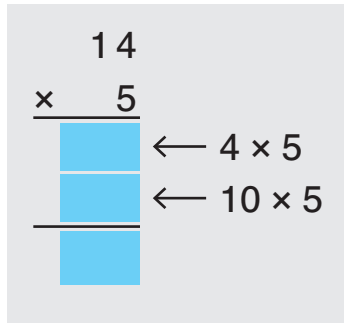
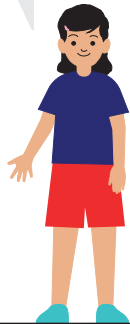
$\begin{array}{r} 24 \\ \times 3 \\ \hline 12 \\ 60 \\ \hline 72 \end{array}$	$\begin{array}{r} 24 \\ \times 3 \\ \hline 12 \\ 60 \\ \hline 72 \end{array}$
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# Do

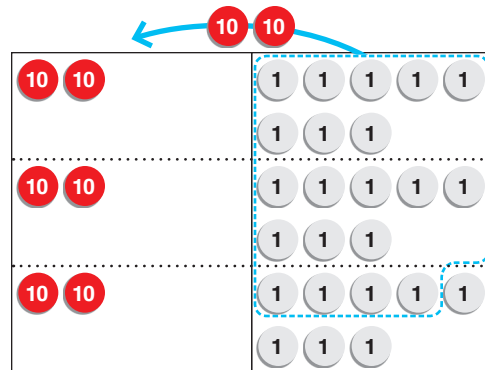
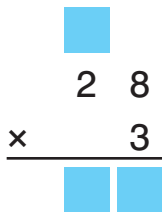
1 Multiply 14 by 5.



Remember not to multiply the regrouped tens.

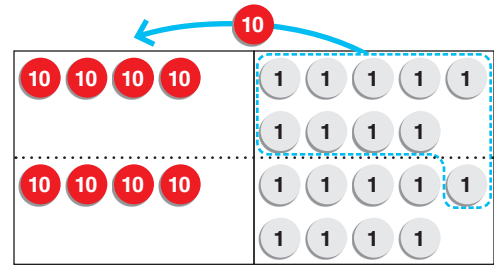


2 Multiply 3 by 28.



3 Multiply 49 by 2.

$$\begin{array}{r}
 \square \\
 49 \\
 \times \quad 2 \\
 \hline
 \square \square
 \end{array}$$



4 What are the missing digits?

(a)

$$\begin{array}{r}
 \square \\
 \square 8 \\
 \times \quad 4 \\
 \hline
 72
 \end{array}$$

(b)

$$\begin{array}{r}
 \square \\
 35 \\
 \times \quad \square \\
 \hline
 70
 \end{array}$$

5 Find the value.

(a)  $17 \times 5$

(b)  $38 \times 2$

(c)  $25 \times 3$

(d)  $24 \times 4$

(e)  $7 \times 15$

(f)  $5 \times 19$

6



There are 18 sponsors for the race.  
 Each sponsor donated 3 raffle prizes.  
 How many raffle prizes are there?