

Chapter 9 Multiplication and Division of 3 and 4

Exercise 1

Basics

1 Count by threes and complete the multiplication equations.



$1 \times 3 = \square$



$2 \times 3 = \square$



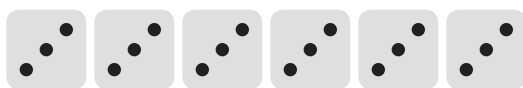
$3 \times 3 = \square$



$4 \times 3 = \square$



$5 \times 3 = \square$



$6 \times 3 = \square$



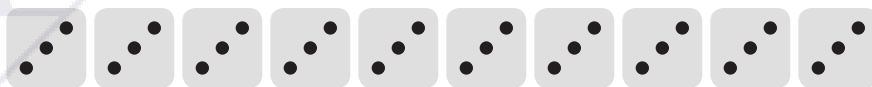
$7 \times 3 = \square$



$8 \times 3 = \square$



$9 \times 3 = \square$



$10 \times 3 = \square$

2 The sum of the digits in the products is _____, _____, or _____.

Practice

- 3 (a) 3×3 is _____ more than 2×3 .

$$3 \times 3 = \boxed{}$$

- (b) 4×3 is 3 more than _____ $\times 3$.

$$4 \times 3 = \boxed{}$$

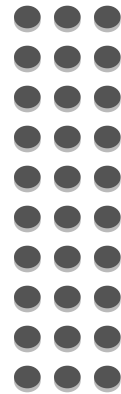
(c) $5 \times 3 = \boxed{}$

$$6 \times 3 = 15 + \boxed{} = \boxed{}$$

$$7 \times 3 = 15 + \boxed{} = \boxed{}$$

(d) $9 \times 3 = 30 - \boxed{} = \boxed{}$

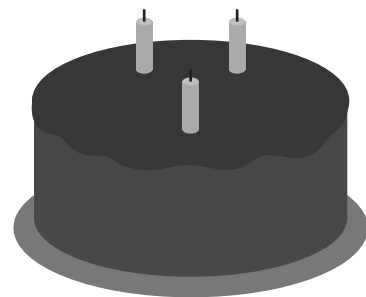
$$8 \times 3 = \boxed{} - 6 = \boxed{}$$



- 4 Each cake has 3 candles.
How many candles are on 7 cakes?

$$\boxed{} \times \boxed{} = \boxed{}$$

_____ candles are on 7 cakes.



- 5 Circle products of 3.

17 16 12 9 25 21 18

Exercise 2

Basics



$$3 + 3 + 3 + 3 + 3 + 3 = \square$$

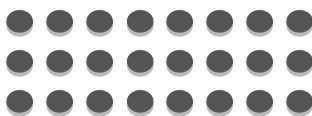
$$6 \times 3 = \square$$



$$6 + 6 + 6 = \square$$

$$3 \times 6 = \square$$

2 $8 \times 3 = \square$



$$3 \times 8 = \square$$

3 (a) $5 \times 3 = \square$

$$3 \times 5 = \square$$

(b) $2 \times 3 = \square$

$$3 \times 2 = \square$$

(c) $7 \times 3 = \square$

$$3 \times 7 = \square$$

(d) $10 \times 3 = \square$

$$3 \times 10 = \square$$

(e) $1 \times 3 = \square$

$$3 \times 1 = \square$$

(f) $9 \times 3 = \square$

$$3 \times 9 = \square$$

(g) $4 \times 3 = \square$

$$3 \times 4 = \square$$

(h) $3 \times 3 = \square$

Practice

4 Match.

3×3

9

3×2

3×6

18

3×5

10×3

30

4×3

3×7

3

3×10

2×3

12

8×3

3×8

6

6×3

3×4

24

3×3

9×3

15

7×3

5×3

21

3×9

1×3

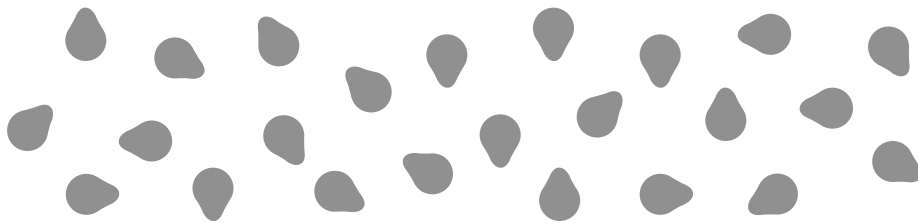
27

3×1

Exercise 3

Basics

- 1 Dion is planting 3 tomato seeds in each jiffy pot.
How many jiffy pots does he need for 24 seeds?



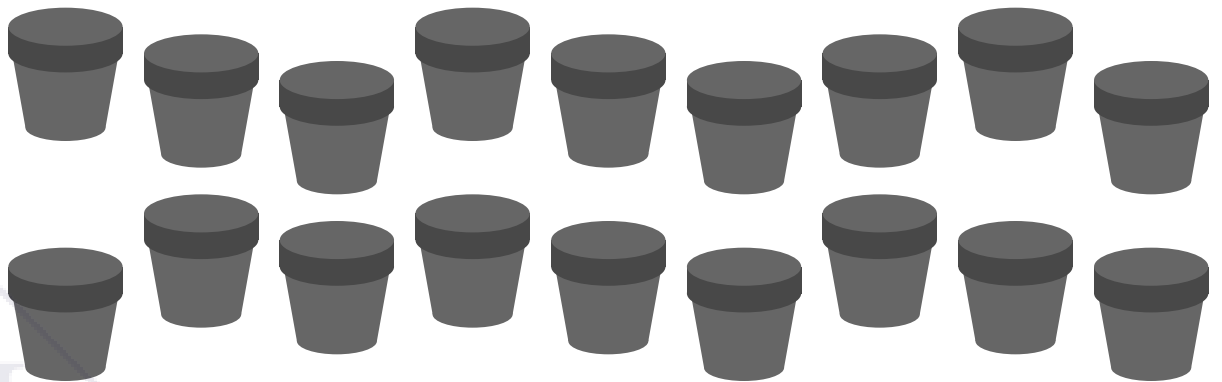
$$\square \times 3 = 24$$

_____ groups of 3 is 24.

$$24 \div 3 = \square$$

He needs _____ jiffy pots.

- 2 Sofia divided 18 jiffy pots equally onto 3 trays.
How many pots did she put on each tray?



$$3 \times \square = 18$$

3 groups of _____ is 18.

$$18 \div 3 = \square$$

She put _____ jiffy pots on each tray.

Practice

3

$$\square \times 3 = 12$$

$$12 \div 3 = \square$$

$$\square \times 3 = 9$$

$$9 \div 3 = \square$$

$$\square \times 3 = 30$$

$$30 \div 3 = \square$$

$$\square \times 3 = 15$$

$$15 \div 3 = \square$$

$$\square \times 3 = 24$$

$$24 \div 3 = \square$$

$$\square \times 3 = 3$$

$$3 \div 3 = \square$$

$$\square \times 3 = 18$$

$$18 \div 3 = \square$$

$$\square \times 3 = 6$$

$$6 \div 3 = \square$$

$$\square \times 3 = 21$$

$$21 \div 3 = \square$$

$$\square \times 3 = 27$$

$$27 \div 3 = \square$$

4

(a) $\square \div 3 = 4$

(c) $\square \div 3 = 7$

(e) $\square \div 3 = 6$

(b) $\square \div 3 = 9$

(d) $\square \div 3 = 5$

(f) $\square \div 3 = 8$

- 5 Avery, Dana, and Grace share a box of 12 colored pencils equally.
How many pencils does each girl get?

$$12 \div 3 = \square$$

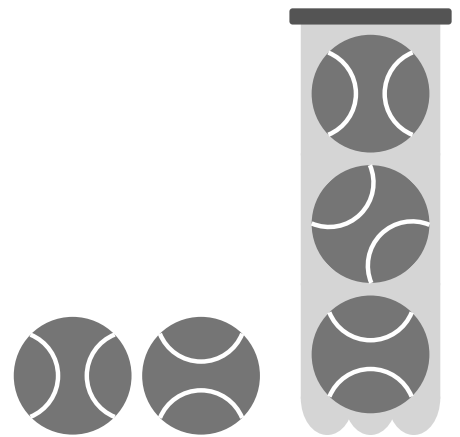
Each girl gets _____ pencils.



- 6 There are 21 tennis balls.
Sharif puts 3 tennis balls in each can.
How many cans does he need?

$$\square \circ \square = \square$$

He needs _____ cans.



- 7 Laila has a ribbon that is 9 feet long.
She cuts it into 3 equal pieces.
How long is each piece?

$$\square \circ \square \circ \square$$

Each piece is _____ feet long.



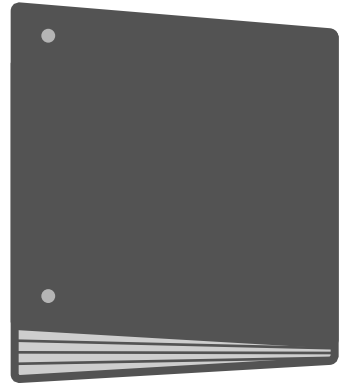
Challenge

- 8** Caleb has 2 boxes with 6 markers in each box. He and two friends share them equally. How many markers does each boy get?

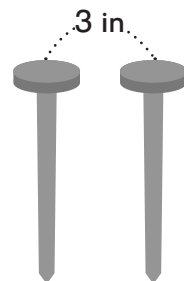
Each boy gets _____ markers.

- 9** Mariya has 20 photos and 3 pages in her album. If she wants to put the same number of photos on each page, what is the least number of photos she will have left over?

She will have _____ photos left over.



- 10** Ryan is placing stakes 3 inches apart from each other. The distance from the first to the last stake is 30 inches. How many stakes has he placed?



He has placed _____ stakes.

Exercise 4

Check

1 Add or subtract.

$896 + 48 = \square$

$279 + 107 = \square$

$456 + 365 = \square$

$148 - 82 = \square$

$432 - 63 = \square$

$803 - 29 = \square$

2 Write +, -, ×, ÷, or = in each ○.

(a) $15 \bigcirc 3 \bigcirc 5$

(b) $15 \bigcirc 3 \bigcirc 12$

(c) $15 \bigcirc 3 \bigcirc 18$

(d) $12 \bigcirc 3 \bigcirc 9$

(e) $24 \bigcirc 3 \bigcirc 21$

(f) $21 \bigcirc 3 \bigcirc 7$

(g) $7 \bigcirc 3 \bigcirc 10$

(h) $10 \bigcirc 3 \bigcirc 30$

(i) $3 \bigcirc 3 \bigcirc 1$

(j) $3 \bigcirc 3 \bigcirc 6$

3 Multiply or divide.

$2 \times 5 = \square$ S	$9 \times 5 = \square$ N	$6 \times 3 = \square$ H
$10 \times 3 = \square$ R	$15 \div 3 = \square$ T	$27 \div 3 = \square$ U
$7 \times 2 = \square$ R	$10 \div 5 = \square$ E	$3 \times 2 = \square$ S
$4 \times 3 = \square$ N	$3 \times 7 = \square$ E	$18 \div 1 = \square$ H
$24 \div 3 = \square$ R	$9 \div 3 = \square$ I	$8 \times 2 = \square$ E
$35 \div 5 = \square$ O	$5 \times 10 = \square$ T	$20 \div 5 = \square$ O

Write the letters that match the answers above to learn a fun fact.

18	4	8	10	21	6	15	14	9	12	24	7	45

11	50	18	16	3	30	27	5	4	2	6	19	36

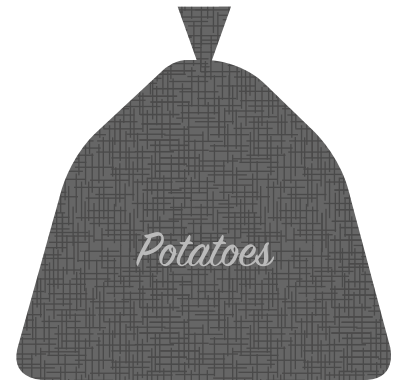
- 4 3 bags of flour weigh 9 kilograms.
How much does one bag of flour weigh?

One bag of flour weighs _____ kg.



- 5 A bag of potatoes weighs 3 kilograms.
How much do 9 bags of potatoes weigh?

9 bags of potatoes weigh _____ kg.



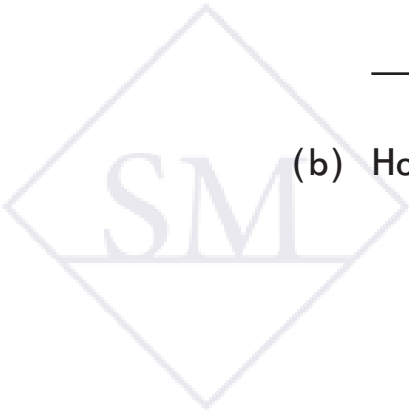
- 6 Arman can fit 15 pots equally onto 3 trays.

(a) How many pots go on each tray?

_____ pots go on each tray.

(b) How many trays are needed for 25 pots?

_____ trays are needed for 25 pots.



Challenge

7  +  +  = 12

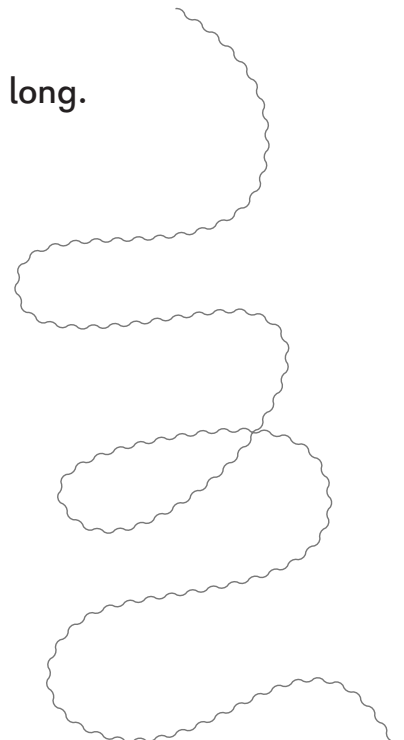
 +  +  +  = 14

 +  +  =

- 8 There are 10 tricycles and bicycles in all.
If there are 23 wheels, how many are bicycles and how many are tricycles?

There are _____ bicycles and _____ tricycles.

- 9 A piece of string is 20 ft long.
It is cut into as many pieces as possible that are each 3 ft long.
How many 3-ft long pieces are there?
How long is the left over piece of string?



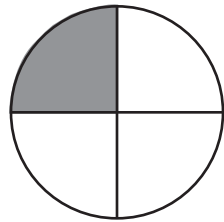
There are _____ pieces that are 3 ft long.

The left over piece of string is _____ ft long.

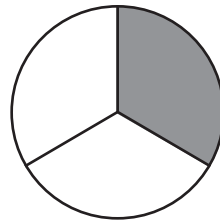
Exercise 5

Basics

1 (a)



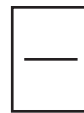
$\frac{1}{4}$



$\frac{1}{3}$

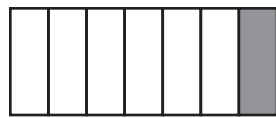


of the circle is larger than

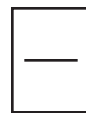


of the same size circle.

(b)

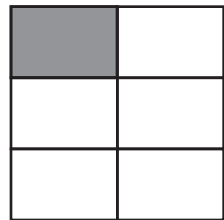


of the rectangle is larger than

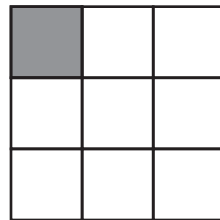


of the same size rectangle.

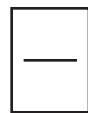
2 (a)



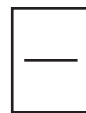
$\frac{1}{6}$



$\frac{1}{9}$

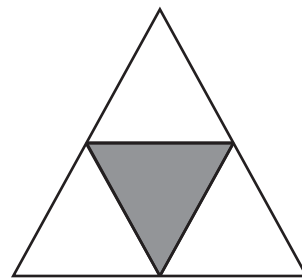
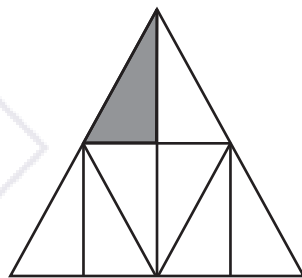


of the square is smaller than

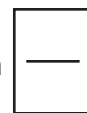


of the same size rectangle.

(b)



of the triangle is smaller than



of the same-size triangle.

Practice

- 3** Color one part of each rectangle to show the given fraction.
Then use the rectangles to answer the problems below.

$\frac{1}{3}$

--	--	--

$\frac{1}{5}$

--	--	--	--	--

$\frac{1}{6}$

--	--	--	--	--	--

$\frac{1}{8}$

--	--	--	--	--	--	--	--

$\frac{1}{9}$

--	--	--	--	--	--	--	--	--

$\frac{1}{10}$

--	--	--	--	--	--	--	--	--	--

$\frac{1}{12}$

--	--	--	--	--	--	--	--	--	--	--	--

- 4** Circle the largest fraction.

(a) $\frac{1}{8}$ $\frac{1}{3}$ $\frac{1}{10}$

(b) $\frac{1}{6}$ $\frac{1}{8}$ $\frac{1}{9}$

(c) $\frac{1}{5}$ $\frac{1}{12}$ $\frac{1}{9}$

(d) $\frac{1}{10}$ $\frac{1}{6}$ $\frac{1}{3}$

- 5** Circle the smallest fraction.

(a) $\frac{1}{8}$ $\frac{1}{6}$ $\frac{1}{12}$

(b) $\frac{1}{6}$ $\frac{1}{3}$ $\frac{1}{9}$

(c) $\frac{1}{5}$ $\frac{1}{8}$ $\frac{1}{9}$

(d) $\frac{1}{10}$ $\frac{1}{6}$ $\frac{1}{5}$

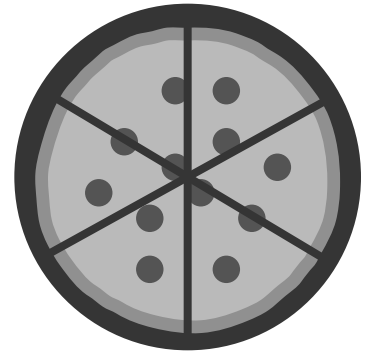
- 6 Write the fractions in order, beginning with the smallest.

$$\frac{1}{6} \quad \frac{1}{9} \quad \frac{1}{7} \quad \frac{1}{2} \quad \frac{1}{10}$$

- 7 Write the fractions in order, beginning with the largest.

$$\frac{1}{4} \quad \frac{1}{12} \quad \frac{1}{5} \quad \frac{1}{8} \quad \frac{1}{11}$$

- 8 Darryl ate $\frac{1}{6}$ of a pizza.
His brother ate $\frac{1}{3}$ of the same pizza.
Who ate less?

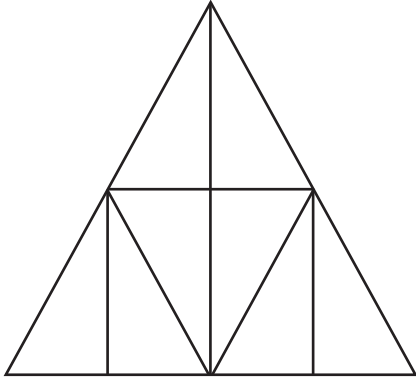


- 9 Fang painted $\frac{1}{8}$ of a room, Debra painted $\frac{1}{5}$ of the room,
and Alice painted $\frac{1}{3}$ of the room.
Who painted the most?

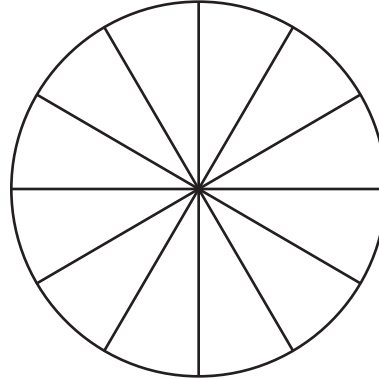
- 10 Wainani has finished reading about a third of her book.
Has she finished more or less than half of her book?

Challenge

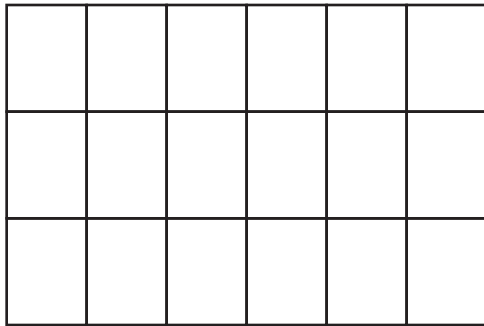
- 11** Use different colors to show each fraction.
The colored parts should not overlap.
Circle the largest fraction for each.



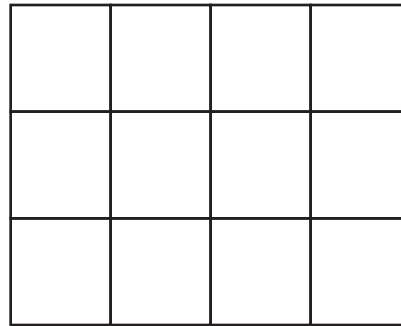
$$\frac{1}{8} \quad \frac{1}{4}$$



$$\frac{1}{4} \quad \frac{1}{3} \quad \frac{1}{6}$$



$$\frac{1}{6} \quad \frac{1}{18} \quad \frac{1}{9}$$



$$\frac{1}{3} \quad \frac{1}{4} \quad \frac{1}{6} \quad \frac{1}{12}$$

- 12** Is two-fourths of a shape larger than two-fifths of that same shape?

- 13** Circle the smaller fraction.

(a) $\frac{2}{8}$ $\frac{2}{4}$

(b) $\frac{2}{6}$ $\frac{2}{3}$