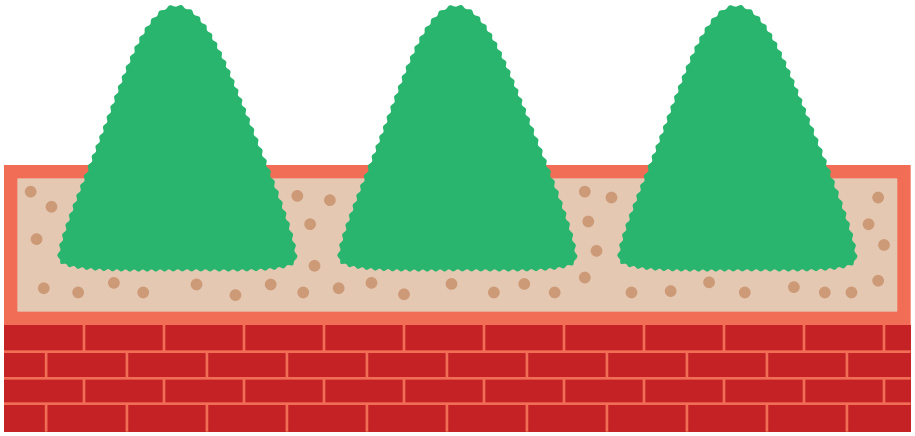
Lesson 1
The Multiplication Table of 3

1

Think

There are 3 trees in each planter.



$1 \times 3 =$ ☐

How many trees are there in ☐ planters?

☐ $\times 3 = ?$

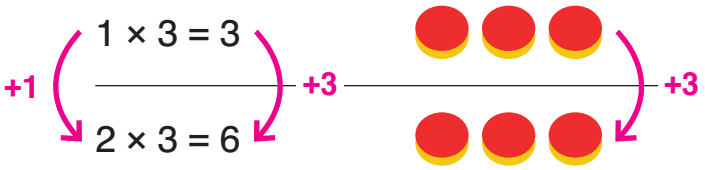
How many trees are there in 2 planters?

Find the number of trees if there are ...

3, 4, 5, 6, 7, 8, 9, and 10 planters.

How does the total number of trees change when the number of planters increases by 1?

Learn



$1 \times 3 = 3$

$2 \times 3 = 6$

$3 \times 3 = 9$

3×3 is ☐ more than 2×3.

$4 \times 3 = 12$

4×3 is ☐ less than 5×3.

$5 \times 3 = 15$

$6 \times 3 = 18$

$7 \times 3 = 21$

7×3 is 3 more than ☐ $\times 3$.

$8 \times 3 = 24$

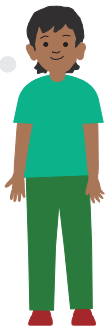
$9 \times 3 = 27$

9×3 is 3 less than ☐ $\times 3$.

$10 \times 3 = 30$

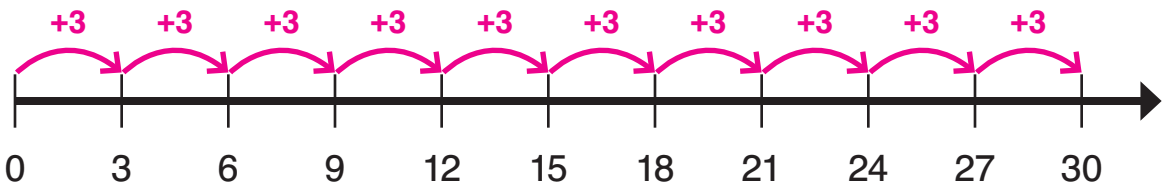
Look at the products.
If you add the digit in the ones place to the digit in the tens place, what do you notice about the sums?

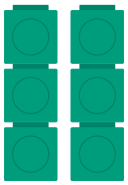
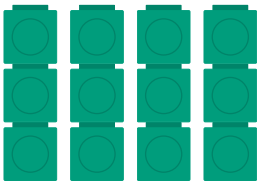
12: 1 + 2 = 3,
15: 1 + 5 = 6,
18: 1 + 8 = 9,
21: 2 + 1 = 3,
...



Do

1 Count by 3s to 30.



2 (a)  $2 \times 3 =$ ☐ (b)  $4 \times 3 =$ ☐

3 Use array dot cards to find the totals.

(a) $5 \times 3 =$ ☐ (b) $10 \times 3 =$ ☐

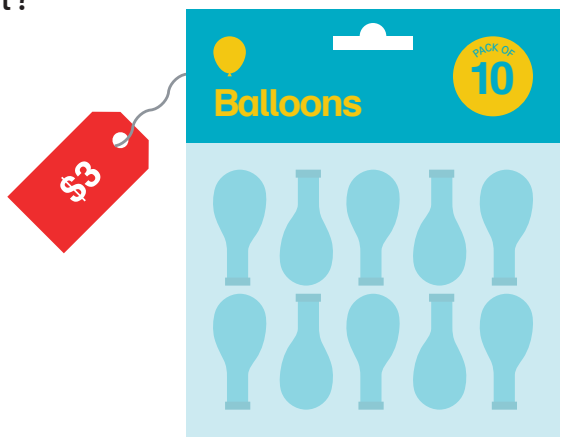
$6 \times 3 =$ ☐ $9 \times 3 =$ ☐

$7 \times 3 =$ ☐ $8 \times 3 =$ ☐

4 How much do 9 bags of balloons cost?

☐ × ☐ = ☐

9 bags cost $☐.



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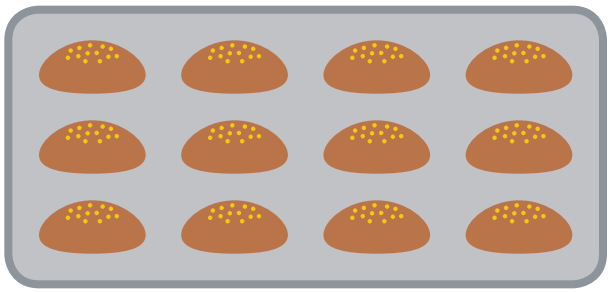
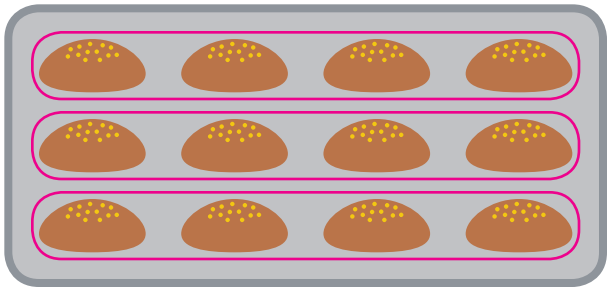
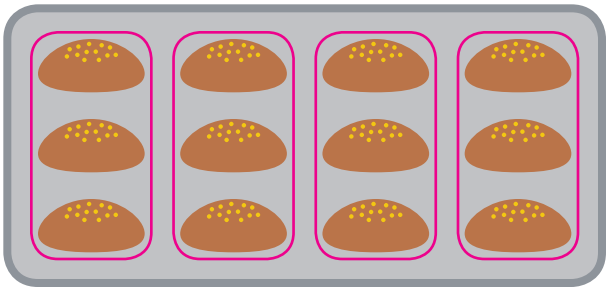
Think



How can we use multiplication to find the total number of rolls?

Learn





$4 + 4 + 4 =$ ☐ | $3 \times 4 =$ ☐

$3 + 3 + 3 + 3 =$ ☐ | $4 \times 3 =$ ☐

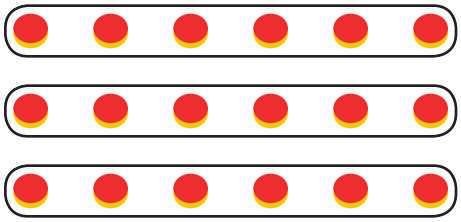
$3 \times 4 = 4 \times 3$

We can use rows or columns.

There are ☐ rolls altogether.

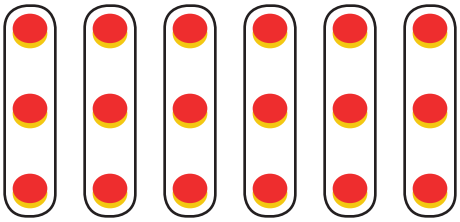
Do

1



$6 + 6 + 6 =$ ☐

$3 \times 6 =$ ☐



$3 + 3 + 3 + 3 + 3 + 3 =$ ☐

$6 \times 3 =$ ☐

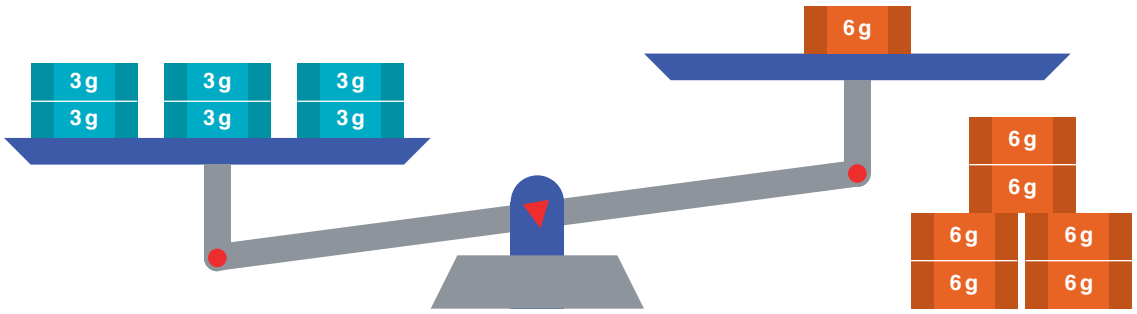
2 (a) $2 \times 3 =$ ☐ $\times 2$

(b) $7 \times$ ☐ $= 3 \times 7$

(c) $9 \times 3 = 3 \times$ ☐

(d) ☐ $\times 3 = 3 \times 5$

3

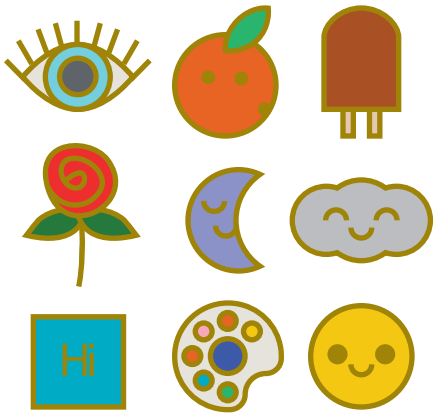


How many more of the 6-gram weights do we need to make the scale balance?

4 Sophia's jacket has 3 rows of 3 pins.
How many pins are on the jacket?

☐ $\times$ ☐ $=$ ☐

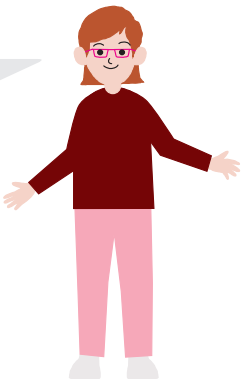
There are ☐ pins.



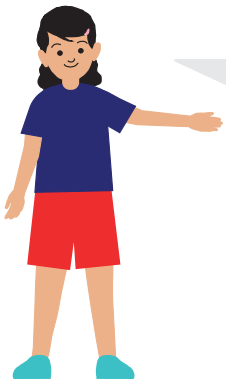
5 What is the value of each?

1 × 3	3 × 1
2 × 3	3 × 2
3 × 3	3 × 3
4 × 3	3 × 4
5 × 3	3 × 5
6 × 3	3 × 6
7 × 3	3 × 7
8 × 3	3 × 8
9 × 3	3 × 9
10 × 3	3 × 10

Make flash cards and practice the multiplication facts of 3.



3 × 8	24

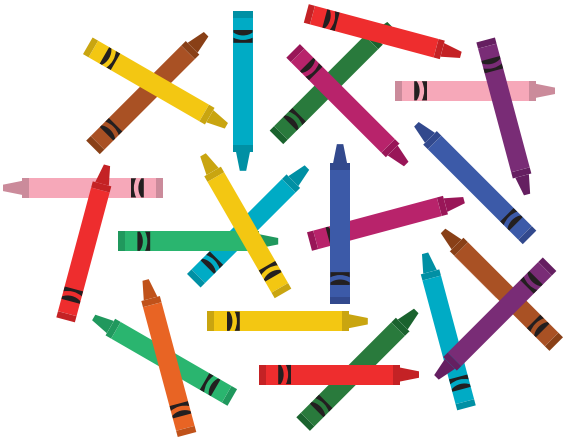


Which facts did you already learn from the multiplication facts of 2, 5, and 10?

Exercise 2 • page 29

Think

There are 24 crayons.

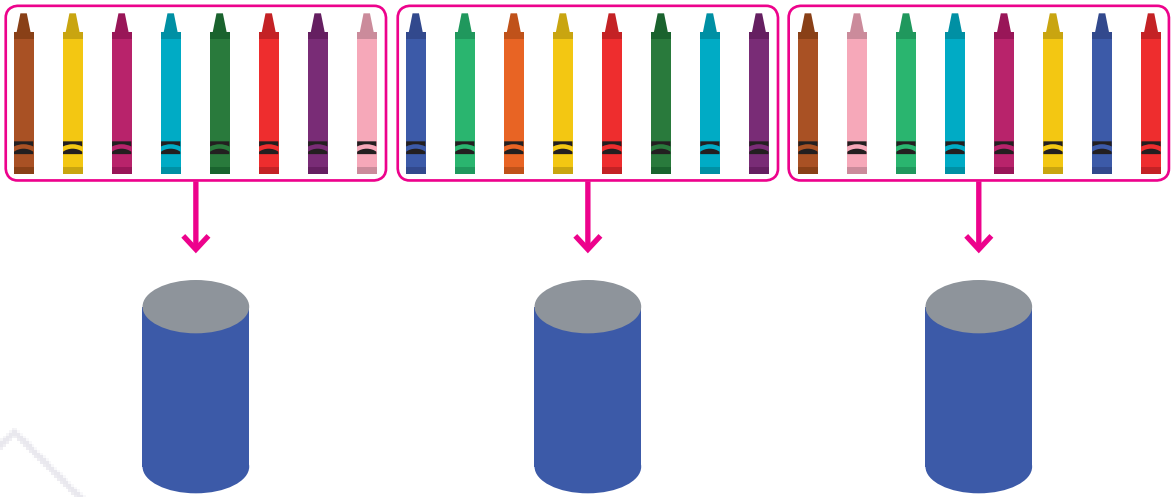


(a) Put them equally into 3 cups.
How many are in each cup?

(b) Put 3 crayons in each cup.
How many cups are needed?

Learn

(a) Make 3 equal groups.

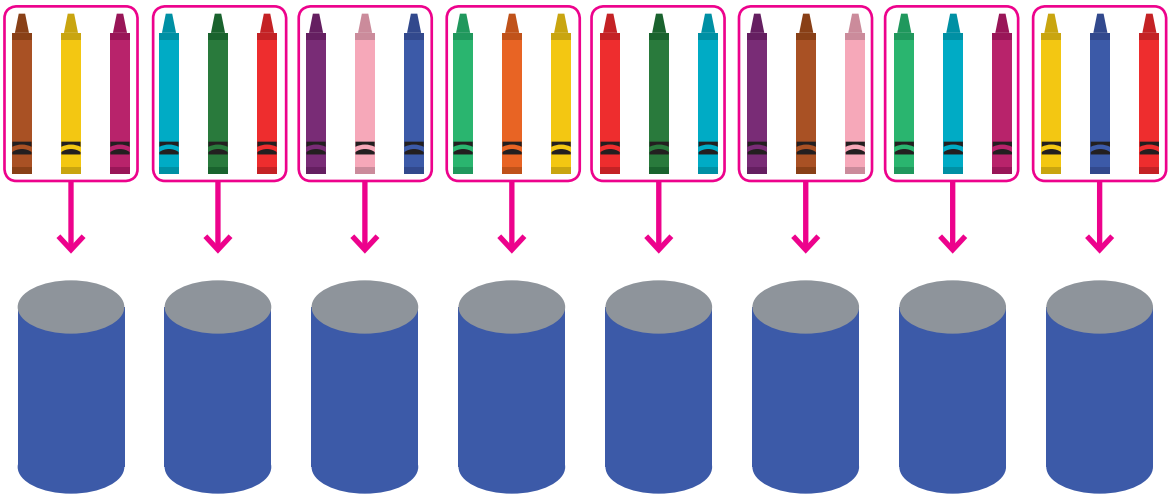


$3 \times \square = 24$ ↔ $24 \div 3 = \square$

3	×	□	=	24		24	÷	3	=	□
↑		↑		↑		↑		↑		↑
number of groups		number in each group		total		total		number of groups		number in each group

There are □ crayons in each cup.

(b) Group by 3.



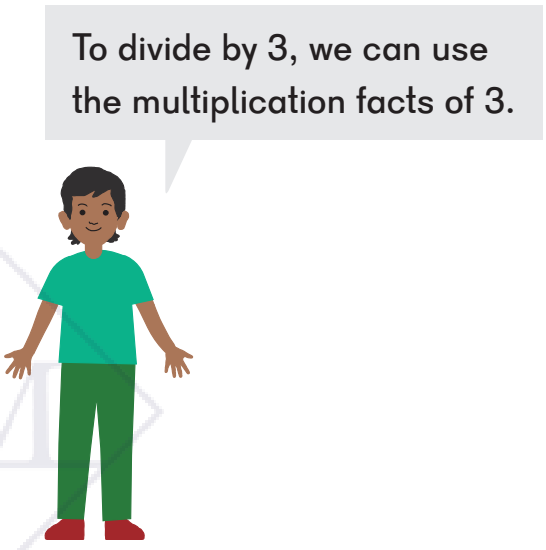
$\square \times 3 = 24$

↑ number of groups; ↑ number in each group; ↑ total

$24 \div 3 = \square$

↑ total; ↑ number in each group; ↑ number of groups

$\square$ cups are needed.



Do

1 (a) Divide 18 counters into 3 equal groups.

$18 \div 3 =$ ☐

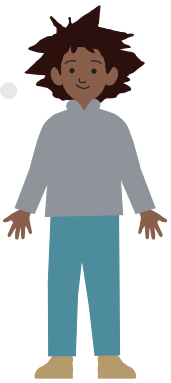
There are ☐ counters in each group.

$3 \times ? = 18$

(b) Divide 18 counters into groups of 3.

$18 \div 3 =$ ☐

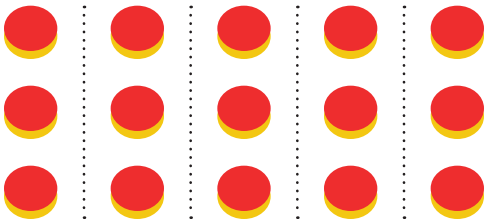
There are ☐ groups.



$? \times 3 = 18$

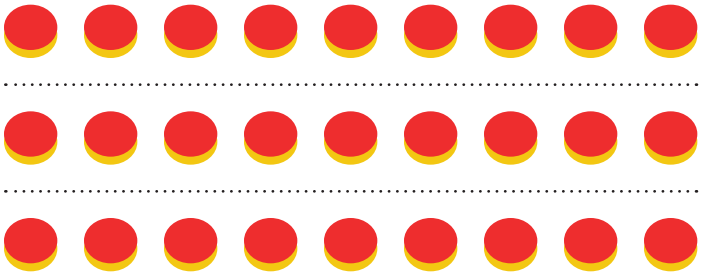
2 (a) ☐ $\times 3 = 15$

$15 \div 3 =$ ☐



(b) $3 \times$ ☐ $= 27$

$27 \div 3 =$ ☐



3 Find the value.

(a) $21 \div 3$ (b) $12 \div 3$ (c) $6 \div 3$

(d) $30 \div 3$ (e) $9 \div 3$ (f) $24 \div 3$

Exercise 3 • page 31