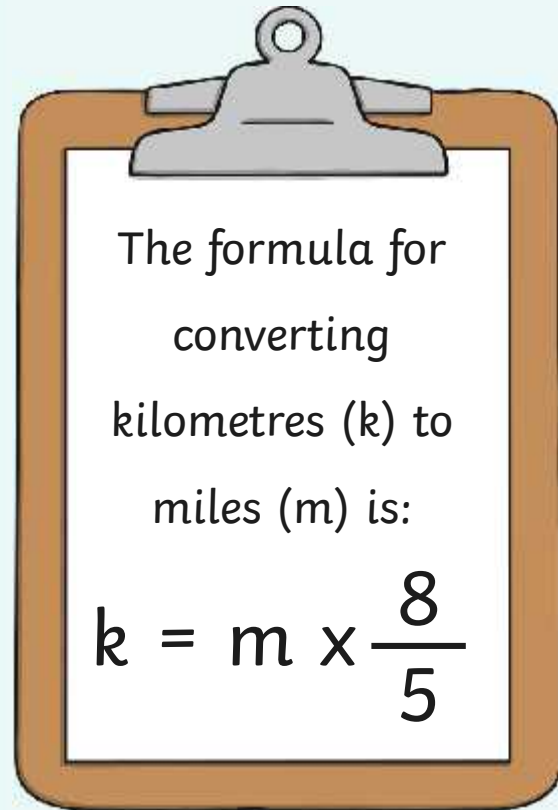


Year 6 Maths Mastery

Use Simple Formulae



Miles and Kilometres



a. Convert the following mileages to kilometres:

5 miles

8 km

12 miles

19.2 km

20 miles

32 km

55 miles

88 km

62.5 miles

100 km

b. Convert the formula so it will convert kilometres to miles.

$$m = k \times \frac{5}{8}$$

Discuss your answers with a partner and test them using your new formula.

Hide
Answers

Area of a Rectangle

$$A = ab$$



The area of a rectangle is expressed by this formula.
(A is the area, a and b are the length of the adjacent sides.)

Complete this table:

a (cm)	b (cm)	A (cm ²)
4	6	24
8	4	32
12	3	36
9	5	45
6	15	90

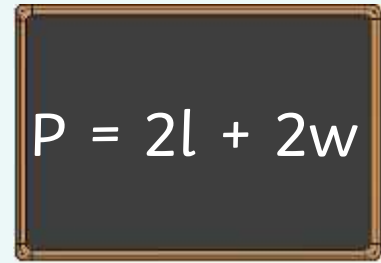
Create your own table for a partner to complete.

Hide
Answers

Perimeter of a Rectangle

The perimeter of a rectangle is expressed by this formula.

(P is the perimeter, l and w are the length of the adjacent sides.)


$$P = 2l + 2w$$

Complete this table:

l (cm)	w (cm)	P (cm)
3	9	24
7	6	26
14	8	44
21	16	74
26	42	136

Create your own table for a partner to complete.

Hide
Answers

Simple Formulae

In each of these formulae, calculate the value of y when $x=6$ and of x when $y = 6$.

Formula	$x = 6$	$y = 6$
$y = x + 2$	$y = 8$	$x = 4$
$y = 2x - 4$	$y = 8$	$x = 5$
$y = 3 + 3x$	$y = 21$	$x = 1$
$2y = x + 8$	$y = 7$	$x = 4$



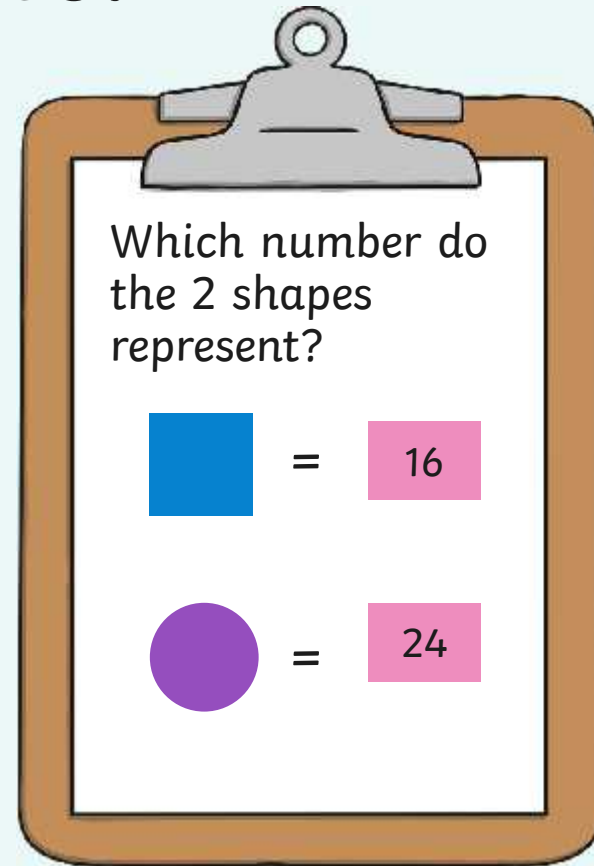
Challenge a partner to find different values of y or x when using different values. Try your own formulae.

Hide
Answers

What numbers?

Each shape stand for a number.

$$\begin{array}{ccccccc} \square & + & \bigcirc & + & \bigcirc & + & \square & = & 80 \\ + & & & & & & & & \\ \bigcirc & & & & & & & & \\ + & & & & & & & & \\ \square & & & & & & & & \\ = & & & & & & & & \\ 56 & & & & & & & & \end{array}$$



Explain how you found the answer to a partner and then create your own puzzle for them to solve.

Hide Answers

