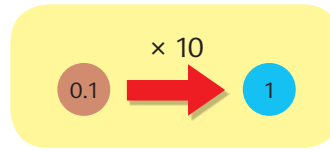
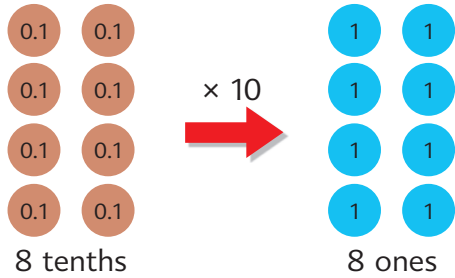
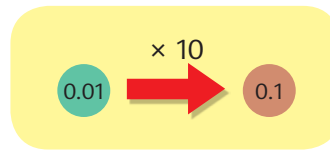
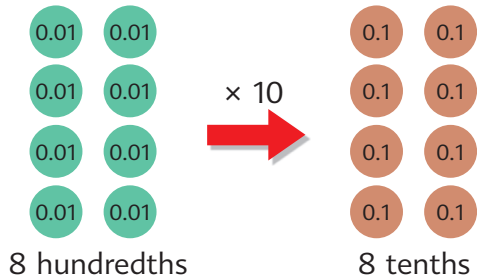


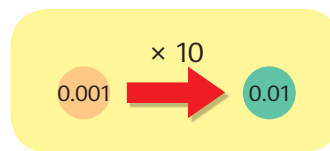
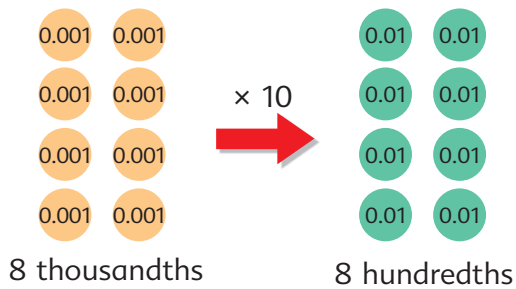
# 5 Multiplication by Tens, Hundreds, or Thousands



$$0.8 \times 10 = 8$$



$$0.08 \times 10 = 0.8$$



$$0.008 \times 10 = 0.08$$

1. Multiply.

(a)  $0.6 \times 10$

(b)  $0.8 \times 10$

(c)  $0.9 \times 10$

(d)  $0.02 \times 10$

(e)  $0.04 \times 10$

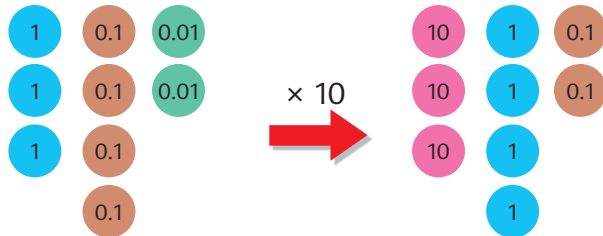
(f)  $0.03 \times 10$

(g)  $0.005 \times 10$

(h)  $0.006 \times 10$

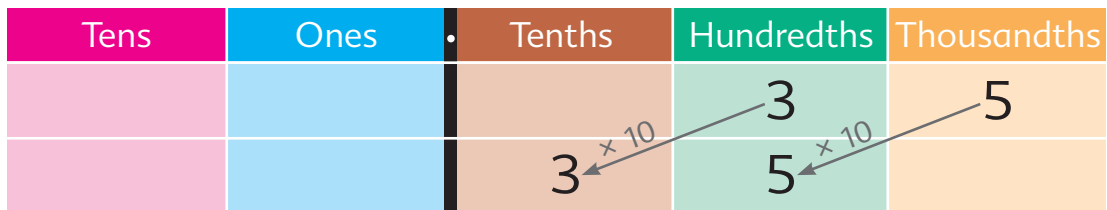
(i)  $0.007 \times 10$

2. Multiply 3.42 by 10.



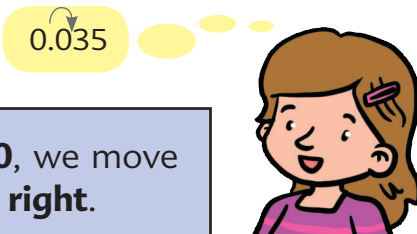
$3.42 \times 10 = 34.2$

3. Multiply 0.035 by 10.



$0.035 \times 10 = 0.35$

$0.035 \times 10^1 = 0.35$



When a decimal is **multiplied by 10**, we move the decimal point **one** place to the **right**.

4. Multiply.

(a)  $0.12 \times 10$

(b)  $0.068 \times 10$

(c)  $0.345 \times 10$

(d)  $2.05 \times 10$

(e)  $3.21 \times 10$

(f)  $1.439 \times 10$

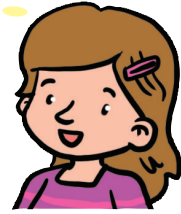
(g)  $7.5 \times 10$

(h)  $10.4 \times 10$

(i)  $11.8 \times 10$

5. Multiply 0.53 by 40.  
 $0.53 \times 40 = 2.12 \times 10$   
 $=$

$0.53 \times 4 = 2.12$



6. Multiply.

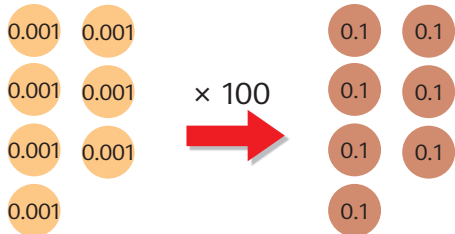
(a)  $0.006 \times 30$   
 (d)  $0.32 \times 20$

(b)  $0.08 \times 40$   
 (e)  $6.81 \times 70$

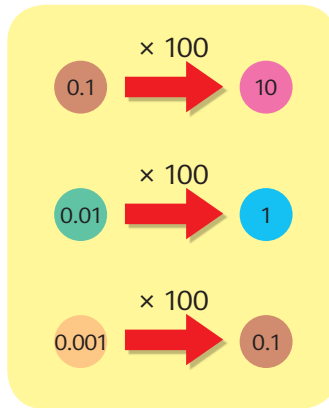
(c)  $0.9 \times 50$   
 (f)  $3.248 \times 60$

Exercise 9, page 17

7. Multiply  $0.007 \times 100$ .



$0.007 \times 100 =$



8. Multiply 4.23 by 100.

Hundreds	Tens	Ones	Tenths	Hundredths
		4	2	3
4	2	3		

$\leftarrow \times 100$       $\leftarrow \times 100$       $\leftarrow \times 100$

$4.23 \times 100 = 423$   
 $4.23 \times 10^2 = 423$

$4.23$

When a decimal is **multiplied by 100**, we move the decimal point **two** places to the **right**.



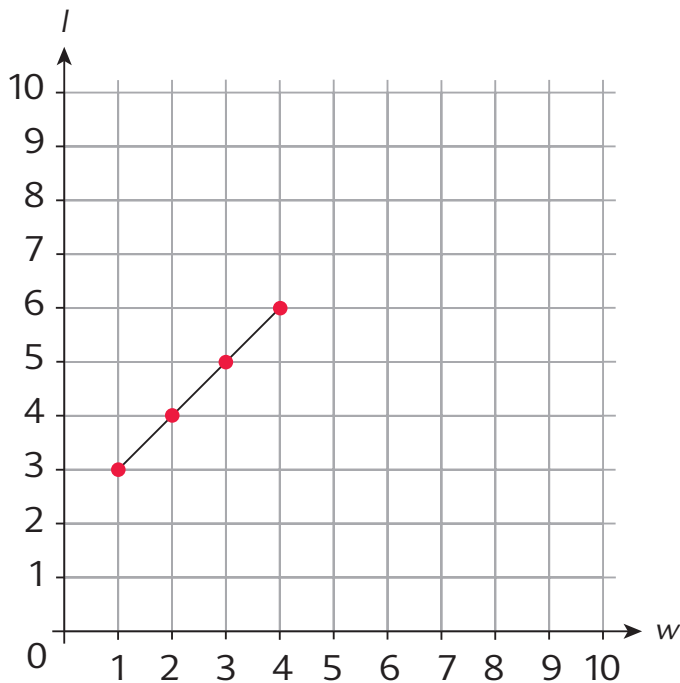
## 4 Line Graphs

The length,  $l$ , of a rectangle is 2 cm more than the width,  $w$ .

$$l = w + 2$$

$w$	$l$	$(w, l)$
1	3	(1, 3)
2	4	(2, 4)
3	5	(3, 5)
4	6	(4, 6)

We can write the width and the length as an ordered pair, and show the values on a coordinate grid.



When the points are connected, we get a straight line.

How can we use the grid to find the length of the rectangle if the width is 6 cm?

1. (a) The first four terms of Sequence A are 1, 3, 5, and 7. Each term is obtained by adding 2 to the previous term. Copy and complete the following table of the first 8 terms of this sequence.

An ordered list of numbers is called a **sequence**. Each number in sequence is called a **term**.

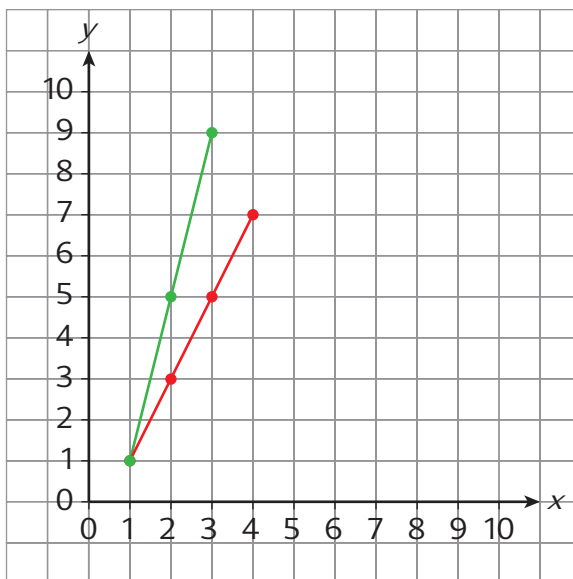


Term ( $x$ )	1	2	3	4	5	6	7	8
Number ( $y$ )	1	3	5	7	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
( $x, y$ )	(1, 1)	(2, 3)	(3, 5)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

- (b) Sequence B starts at 1 and is generated by adding 4 to the previous term. Copy and complete the following table for the first 8 terms of this sequence.

Term ( $x$ )	1	2	3	4	5	6	7	8
Number ( $y$ )	1	5	9	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
( $x, y$ )	(1, 1)	(2, 5)	(3, 9)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

- (c) Copy and complete the graph below, extending the  $y$ -axis. Plot both sets of ordered pairs on the same graph. Connect the points for each set.



Both lines increase. Going from left to right, both the  $x$ -coordinate and the  $y$ -coordinate get larger.

