

# Multiplying decimals by 10, 100 and 1,000

1 Complete the multiplications.

a) 

H	T	O	Tths	Hths
		3	7	

 $3.7 \times 10 =$

b) 

H	T	O	Tths	Hths
	1	4	5	

 $14.5 \times 10 =$

c) 

H	T	O	Tths	Hths
		1	5	8

 $1.58 \times 10 =$

d) 

H	T	O	Tths	Hths
	1	3	0	6

 $13.06 \times 10 =$

What do you notice when you multiply a number by 10?



2 Complete the multiplications.

a)  $1.7 \times 10 =$        d)  $13.4 \times 10 =$

b)  $1.75 \times 10 =$        e)  $10 \times 13.04 =$

c)  $1.73 \times 10 =$        f)  $130.4 \times 10 =$

3 Complete the multiplications.

a) 

H	T	O	Tths	Hths
		4	1	

 $4.1 \times 100 =$

b) 

H	T	O	Tths	Hths
		4	1	5

 $4.15 \times 100 =$

c) 

H	T	O	Tths	Hths
	1	4	5	

 $14.5 \times 100 =$

d) 

H	T	O	Tths	Hths
		4	0	5

 $4.05 \times 100 =$

What do you notice when you multiply a number by 100?



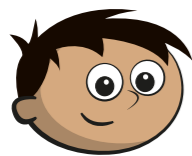
4 Complete the calculations.

a)  $7.2 \times 100 =$        d)  $1.89 \times 100 =$

b)  $3.4 \times 100 =$        e)  $73.57 \times 100 =$

c)  $19.5 \times 100 =$        f)  $1.317 \times 100 =$

5 Amir has multiplied 3.8 by 1,000



The answer is 3.8000

a) What mistake has Amir made?

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b) Work out the correct answer.

$3.8 \times 1,000 = \boxed{\phantom{0000}}$

6 Complete the multiplications.

a)  $4.7 \times 10 = \boxed{\phantom{00}}$

c)  $5.84 \times 10 = \boxed{\phantom{000}}$

$4.7 \times 100 = \boxed{\phantom{000}}$

$5.84 \times 100 = \boxed{\phantom{0000}}$

$4.7 \times 1,000 = \boxed{\phantom{0000}}$

$5.84 \times 1,000 = \boxed{\phantom{00000}}$

b)  $19.3 \times 10 = \boxed{\phantom{000}}$

d)  $18.06 \times 10 = \boxed{\phantom{0000}}$

$19.3 \times 100 = \boxed{\phantom{0000}}$

$100 \times 18.06 = \boxed{\phantom{00000}}$

$1,000 \times 19.3 = \boxed{\phantom{00000}}$

$18.06 \times 1,000 = \boxed{\phantom{000000}}$

How did you work out the answers? Talk to a partner.



7 Complete the calculations.

a)  $7.7 \times \boxed{\phantom{00}} = 770$

e)  $8.032 \times \boxed{\phantom{000}} = 80.32$

b)  $\boxed{\phantom{000}} \times 10 = 1,950$

f)  $\boxed{\phantom{0000}} \times 18.3 = 1,830$

c)  $11.5 \times \boxed{\phantom{000}} = 115$

g)  $195.32 \times \boxed{\phantom{0000}} = 1,953.2$

d)  $\boxed{\phantom{0000}} \times 11.5 = 11,500$

h)  $\boxed{\phantom{00000}} \times 1,000 = 7,200$

8 Tommy is 1.4 m tall.

A tree is 10 times as tall as Tommy.

A building is 100 times as tall as Tommy.

a) How tall is the tree?

 m

b) How much taller is the building than the tree?

 m

9 Match the multiplications to the descriptions.

$\times 10 \times 10$

multiply by 10

$\times 10 \times 10 \times 10$

multiply by 100

$\times 100 \times 10$

multiply by 1,000

$\times 10 \times 100$

$\times 10 \times 1$