

Multiplying decimals by 10, 100 and 1,000

1 Complete the multiplications.

a)

H	T	O	Tths	Hths
		3	7	

 $3.7 \times 10 =$ 37

b)

H	T	O	Tths	Hths
	1	4	5	

 $14.5 \times 10 =$ 145

c)

H	T	O	Tths	Hths
		1	5	8

 $1.58 \times 10 =$ 15.8

d)

H	T	O	Tths	Hths
	1	3	0	6

 $13.06 \times 10 =$ 130.6

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

2 Complete the multiplications.

a) $1.7 \times 10 =$ 17 d) $13.4 \times 10 =$ 134

b) $1.75 \times 10 =$ 17.5 e) $10 \times 13.04 =$ 130.4

c) $1.73 \times 10 =$ 17.3 f) $130.4 \times 10 =$ 1,304

3 Complete the multiplications.

a)

H	T	O	Tths	Hths
		4	1	

 $4.1 \times 100 =$ 410

b)

H	T	O	Tths	Hths
		4	1	5

 $4.15 \times 100 =$ 415

c)

H	T	O	Tths	Hths
	1	4	5	

 $14.5 \times 100 =$ 1,450

d)

H	T	O	Tths	Hths
		4	0	5

 $4.05 \times 100 =$ 405

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

4 Complete the calculations.

a) $7.2 \times 100 =$ 720 d) $1.89 \times 100 =$ 189

b) $3.4 \times 100 =$ 340 e) $73.57 \times 100 =$ 7,357

c) $19.5 \times 100 =$ 1,950 f) $1.317 \times 100 =$ 131.7

- 5 Amir has multiplied 3.8 by 1,000



The answer is 3.8000

- a) What mistake has Amir made?

He has just added zeros.

- b) Work out the correct answer.

$$3.8 \times 1,000 = 3,800$$

- 6 Complete the multiplications.

a) $4.7 \times 10 = 47$

c) $5.84 \times 10 = 58.4$

$4.7 \times 100 = 470$

$5.84 \times 100 = 584$

$4.7 \times 1,000 = 4,700$

$5.84 \times 1,000 = 5,840$

b) $19.3 \times 10 = 193$

d) $18.06 \times 10 = 180.6$

$19.3 \times 100 = 1,930$

$100 \times 18.06 = 1,806$

$1,000 \times 19.3 = 19,300$

$18.06 \times 1,000 = 18,060$

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

- 7 Complete the calculations.

a) $7.7 \times 100 = 770$

e) $8.032 \times 10 = 80.32$

b) $195 \times 10 = 1,950$

f) $100 \times 18.3 = 1,830$

c) $11.5 \times 10 = 115$

g) $195.32 \times 10 = 1,953.2$

d) $1,000 \times 11.5 = 11,500$

h) $7.2 \times 1,000 = 7,200$

- 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?

14 m

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

126 m

- 9 Match the multiplications to the descriptions.

