Multiplying decimals by 10, 100 and 1,000

1 Complete the multiplications.

a)

H	T	O	Tths	Hths
		3	7	

3.7 × 10 = ☐

b)

H	T	O	Tths	Hths
	1	4	5	

14.5 × 10 = ☐

c)

H	T	O	Tths	Hths
		1	5	8

1.58 × 10 = ☐

d)

H	T	O	Tths	Hths
	1	3	0	6

13.06 × 10 = ☐

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

2 Complete the multiplications.

a) 1.7 × 10 = ☐

b) 1.75 × 10 = ☐

c) 1.73 × 10 = ☐

d) 13.4 × 10 = ☐

e) 10 × 13.04 = ☐

f) 130.4 × 10 = ☐

3 Complete the multiplications.

a)

H	T	O	Tths	Hths
		4	1	

4.1 × 100 = ☐

b)

H	T	O	Tths	Hths
		4	1	5

4.15 × 100 = ☐

c)

H	T	O	Tths	Hths
	1	4	5	

14.5 × 100 = ☐

d)

H	T	O	Tths	Hths
		4	0	5

4.05 × 100 = ☐

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

4 Complete the calculations.

a) 7.2 × 100 = ☐

b) 3.4 × 100 = ☐

c) 19.5 × 100 = ☐

d) 1.89 × 100 = ☐

e) 73.57 × 100 = ☐

f) 1.317 × 100 = ☐

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5 Amir has multiplied 3.8 by 1,000

a) What mistake has Amir made?

_____

_____

b) Work out the correct answer. 3.8 × 1,000 = ☐

6 Complete the multiplications.

a) 4.7 × 10 = ☐

4.7 × 100 = ☐

4.7 × 1,000 = ☐

b) 19.3 × 10 = ☐

19.3 × 100 = ☐

1,000 × 19.3 = ☐

c) 5.84 × 10 = ☐

5.84 × 100 = ☐

5.84 × 1,000 = ☐

d) 18.06 × 10 = ☐

100 × 18.06 = ☐

18.06 × 1,000 = ☐

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

7 Complete the calculations.

a) 7.7 × ☐ = 770

b) ☐ × 10 = 1,950

c) 11.5 × ☐ = 115

d) ☐ × 11.5 = 11,500

e) 8.032 × ☐ = 80.32

f) ☐ × 18.3 = 1,830

g) 195.32 × ☐ = 1,953.2

h) ☐ × 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.

× 10 × 10	multiply by 10
× 10 × 10 × 10	
× 100 × 10	multiply by 100
× 10 × 100	
× 10 × 1	multiply by 1,000

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