

Multiply by 10, 100 and 1,000

1 Complete the calculations and sentences.

Use counters to help you.

Th	H	T	O	Tth	Hth
			● ●	● ● ● ●	

a) $2.3 \times 10 =$

When a number is multiplied by 10, the counters move place to the left.

b) $2.3 \times 100 =$

When a number is multiplied by 100, the counters move places to the left.

c) $2.3 \times 1,000 =$

When a number is multiplied by 1,000, the counters move places to the left.

2 Complete the diagram.



3 a) Draw counters on the place value charts to represent the answer to each calculation.

4.4×1

Th	H	T	O	Tth	Hth
				●	

4.4×10

Th	H	T	O	Tth	Hth
				●	

4.4×100

Th	H	T	O	Tth	Hth
				●	

$4.4 \times 1,000$

Th	H	T	O	Tth	Hth
				●	

b) Complete the calculations.

$4.4 \times 1 =$

$4.4 \times 10 =$

$4.4 \times 100 =$

$4.4 \times 1,000 =$

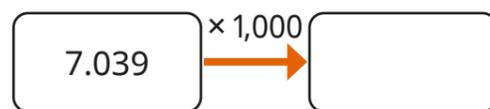
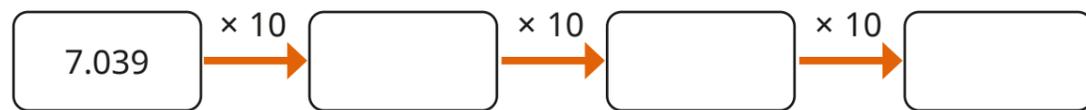
What do you notice?



4 Complete the calculations.

- a) $13.44 \times 10 =$
- b) $41.4 \times 100 =$
- c) $0.415 \times 1,000 =$
- d) $3.06 \times 100 =$
- e) $5.5 \times$ $= 5,500$
- f) $= 1.03 \times 100$
- g) $30.44 =$ $\times 10$
- h) $504 = 100 \times$

5 Complete the diagrams.



What do you notice? Why does this happen?

6 Write $>$, $<$ or $=$ to compare the multiplications.

- $1.4 \times 10 \times 10 \times 10$ $1.4 \times 1,000$
- $1.4 \times 10 \times 100$ $1.4 \times 1,000$
- $1.4 \times 10 \times 10$ $1.4 \times 1,000$
- $1.4 \times 10 \times 2$ 1.4×100

7 Kim is working out 14.3×200
She writes this as her answer.

Explain Kim's mistake.

8 Use the cards to complete the calculation.
You can use each card more than once.



0.002 $= 2,000$

How many different ways can this calculation be completed, using these cards?

Talk about it with a partner.

