

# 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.

$4.4 \times 1$

Th	H	T	O	Tth	Hth

$4.4 \times 10$

Th	H	T	O	Tth	Hth

$4.4 \times 100$

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.

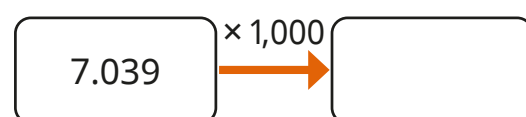
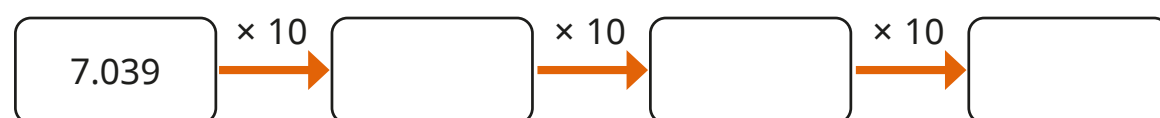
a)  $13.44 \times 10 =$   e)  $5.5 \times$    $= 5,500$

b)  $41.4 \times 100 =$   f)   $= 1.03 \times 100$

c)  $0.415 \times 1,000 =$   g)  $30.44 =$    $\times 10$

d)  $3.06 \times 100 =$   h)  $504 = 100 \times$

5 Complete the diagrams.



What do you notice? Why does this happen?

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

$1.4 \times 10 \times 10 \times 10$    $1.4 \times 1,000$

$1.4 \times 10 \times 100$    $1.4 \times 1,000$

$1.4 \times 10 \times 10$    $1.4 \times 1,000$

$1.4 \times 10 \times 2$    $1.4 \times 100$

7 Kim is working out  $14.3 \times 200$

She writes this as her answer.

$14.3 \times 200 = 28.600$

Explain Kim's mistake.

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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.

