

Dividing decimals by 10, 100 and 1,000



1 Complete the divisions.

a)

H	T	O	Tths	Hths
		5		

 $5 \div 10 =$ 0.5

b)

H	T	O	Tths	Hths
	1	5		

 $15 \div 10 =$ 1.5

c)

H	T	O	Tths	Hths
		3	8	

 $3.8 \div 10 =$ 0.38

d)

H	T	O	Tths	Hths
	1	3	8	

 $13.8 \div 10 =$ 1.38

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



2 Complete the calculations.

a) $7 \div 10 =$ 0.7 d) $16 \div 10 =$ 1.6

b) $7.8 \div 10 =$ 0.78 e) $16.4 \div 10 =$ 1.64

c) $7.86 \div 10 =$ 0.786 f) $16.48 \div 10 =$ 1.648

3 Complete the divisions.

a)

H	T	O	Tths	Hths	Thths
	1	7			

 $17 \div 100 =$ 0.17

b)

H	T	O	Tths	Hths	Thths
		9	4		

 $9.4 \div 100 =$ 0.094

c)

H	T	O	Tths	Hths	Thths
2	7	6			

 $276 \div 100 =$ 2.76

d)

H	T	O	Tths	Hths	Thths
	3	2	5		

 $32.5 \div 100 =$ 0.325

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



4 Complete the divisions.

a) $7 \div 100 =$ 0.07 b) $109 \div 100 =$ 1.09

$7.2 \div 100 =$ 0.072 $10.9 \div 100 =$ 0.109

$7.25 \div 100 =$ 0.0725 $10.95 \div 100 =$ 0.1095

- 5 Use a place value chart to work out $136 \div 1,000$

H	T	O	Tths	Hths	Thths
1	3	6			

Complete the calculation.

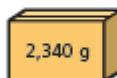
$$136 \div 1,000 = 0.136$$

Talk to a partner about your method.

- 6 Use your knowledge of measure to work out the answers.

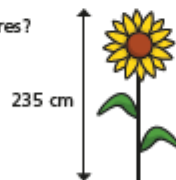
- a) What is the mass of the box in kilograms?

$$2,340 \div 1,000 = 2.34$$



- b) What is the height of the sunflower in metres?

$$235 \div 100 = 2.35$$



- c) What is the amount of juice in litres?

$$380 \div 1,000 = 0.38$$



- 7 Complete the calculations.

a) $147 \div 10 = 14.7$

c) $3,200 \div 10 = 320$

$147 \div 100 = 1.47$

$3,200 \div 100 = 32$

$147 \div 1,000 = 0.147$

$3,200 \div 1,000 = 3.2$

b) $21 \div 10 = 2.1$

d) $5,006 \div 10 = 500.6$

$21 \div 100 = 0.21$

$5,006 \div 100 = 50.06$

$21 \div 1,000 = 0.021$

$5,006 \div 1,000 = 5.006$

- 8 Complete the divisions.

a) $83 \div 100 = 0.83$

e) $1,799 \div 100 = 17.99$

b) $9.5 \div 10 = 0.95$

f) $1180 \div 100 = 11.8$

c) $39 \div 10 = 3.9$

g) $178 \div 10 = 17.8$

d) $68 \div 1,000 = 0.068$

h) $3.18 \div 10 = 0.318$