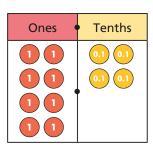
## Divide decimals by integers



1 Use place value counters to work out the divisions.





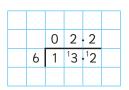
**b)** 12.3 ÷ 3

Tens	Ones	Tenths
10	1 1	0.1 0.1

2 Work out the division. Draw your answer on a place value chart.

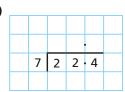
 $16.4 \div 4$ 

Brett uses short division to work out 13.2 ÷ 6

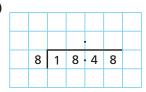


Use short division to work out the calculations.

a)



b)





Work out the divisions.

**a)** 25.6 ÷ 8

c) 18.48 ÷ 6

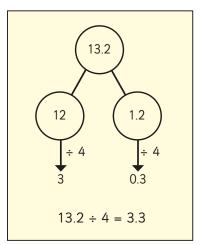
e) 202.35 ÷ 3

**b)** 14.8 ÷ 4

**d)** 19.45 ÷ 5

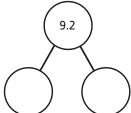
f) 105.12 ÷ 9

5 Esther solves 13.2 ÷ 4 by partitioning 13.2 into two numbers that are easier to divide.

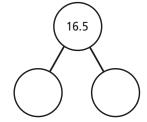


Use Esther's method to complete the part-whole model and calculation.

a)



b)



9.2 ÷ 4 =

Compare answers with a partner. Did you partition your numbers in the same way?



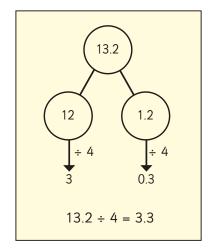
## Divide decimals by integers



4 Work out the divisions.

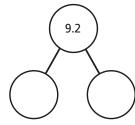
- **a)** 25.6 ÷ 8
- c) 18.48 ÷ 6
- e) 202.35 ÷ 3

- **b)** 14.8 ÷ 4
- **d)** 19.45 ÷ 5
- f) 105.12 ÷ 9
- 5 Esther solves 13.2 ÷ 4 by partitioning 13.2 into two numbers that are easier to divide.

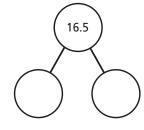


Use Esther's method to complete the part-whole model and calculation.

a)



b)



Compare answers with a partner. Did you partition your numbers in the same way?



6 Work out the divisions.

$$96.4 \div 4$$

$$0.964 \div 4$$

$$9.64 \div 8$$

7 Fill in the missing numbers.

8 Complete the calculation.

How many different solutions can you find?

What patterns do you notice? Talk about it with a partner.

