

Divide decimals by integers



1 Use place value counters to work out the divisions.

a) $8.4 \div 4 =$

Ones		Tenths
1	1	0.1
1	1	0.1
1	1	0.1
1	1	0.1

b) $12.3 \div 3 =$

Tens	Ones	Tenths
10	1	0.1
	1	0.1
		0.1

2 Work out the division. Draw your answer.

$16.4 \div 4 =$

Tens	Ones	Tenths



3 Brett uses short division to work out $13.2 \div 6$

		0	2	2	
	6	1	3	2	

Use short division to work out the calculations.

a)

	7	2	2	4	

b)

	8	1	8	4	8

4 Work out the divisions.

a) $25.6 \div 8 =$

d) $= 19.45 \div 5$

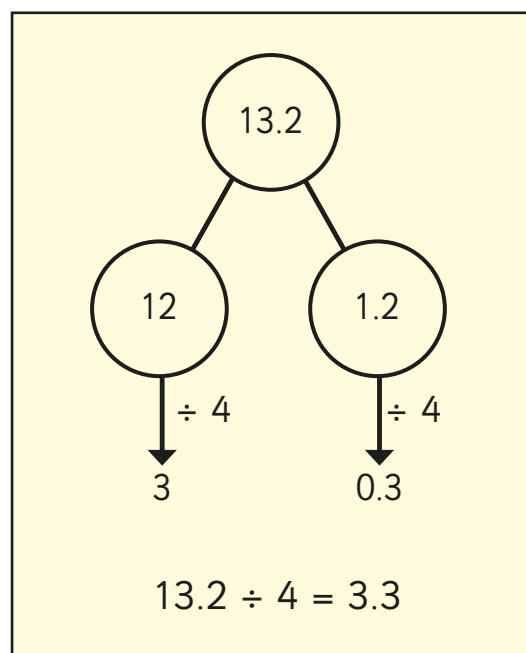
b) $14.8 \div 4 =$

e) $202.35 \div 3 =$

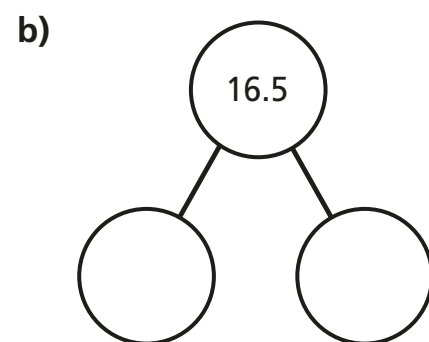
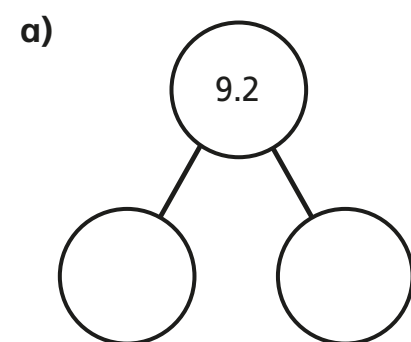
c) $18.48 \div 6 =$

f) $105.12 \div 9 =$

- 5 Esther solves $13.2 \div 4$ by partitioning 13.2 into two numbers that are easier to divide.



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



$$9.2 \div 4 = \boxed{}$$

$$16.5 \div 3 = \boxed{}$$

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



- 6 Work out the divisions.

a) $9.64 \div 4 = \boxed{}$

$$96.4 \div 4 = \boxed{}$$

$$0.964 \div 4 = \boxed{}$$

$$9.64 \div 8 = \boxed{}$$

b) $19.44 \div 9 = \boxed{}$

$$19.53 \div 9 = \boxed{}$$

$$19.62 \div 9 = \boxed{}$$

- 7 Fill in the missing numbers.

$$3.6 \div 4 = 36 \div \boxed{}$$

$$3.6 \div 4 = \boxed{} \div 8$$

- 8 Complete the calculation.

$$8.4 \div \boxed{} = 4.2 \div \boxed{}$$

How many different solutions can you find?

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

