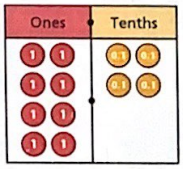
Monday Snorkelling

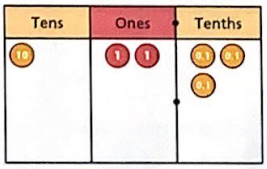
Divide decimals by integers

1 Use place value counters to work out the divisions.

a) 8.4 ÷ 4 = 2.1

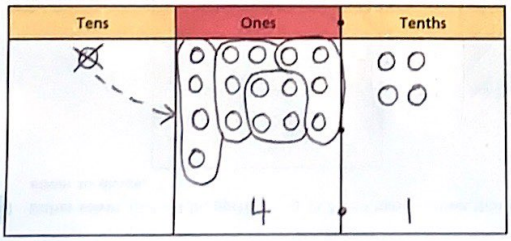


b) 12.3 ÷ 3 = 4.1

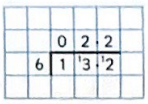


2 Work out the division. Draw your answer.

16.4 ÷ 4 = 4.1

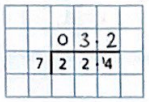


3 Brett uses short division to work out 13.2 ÷ 6

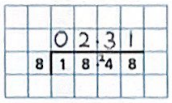


Use short division to work out the calculations.

a)



b)



4 Work out the divisions.

a) 25.6 ÷ 8 = 3.2

b) 14.8 ÷ 4 = 3.7

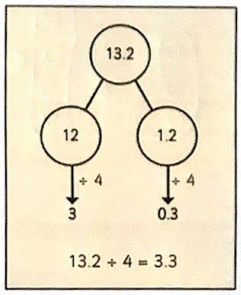
c) 18.48 ÷ 6 = 3.08

d) 3.89 = 19.45 ÷ 5

e) 202.35 ÷ 3 = 67.45

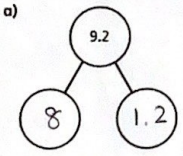
f) 105.12 ÷ 9 = 11.68

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)



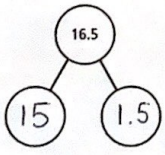
2 0.3

2.3

9.2 ÷ 4 = 2.3

9.2 ÷ 4 = 2.3

b)



5 0.5

5.5

16.5 ÷ 3 = 5.5

16.5 ÷ 3 = 5.5

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

6 Work out the divisions.

a) 9.64 ÷ 4 = 2.41

96.4 ÷ 4 = 24.1

0.964 ÷ 4 = 0.241

9.64 ÷ 8 = 1.205

b) 19.44 ÷ 9 = 2.16

19.53 ÷ 9 = 2.17

19.62 ÷ 9 = 2.18

7 Fill in the missing numbers.

3.6 ÷ 4 = 36 ÷ 40

3.6 ÷ 4 = 7.2 ÷ 8

8 Complete the calculation.

8.4 ÷ 4 = 4.2 ÷ 2

How many different solutions can you find?

The first number must be double the second because 8.4 is double 4.2

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