YEAR 8 · NUMBER

Dividing by Decimals

Use place value to make decimal divisors easier to work with.

Name _____ **Date** _____

Show your working. Multiply the dividend and divisor by the same power of 10 to make the divisor a whole number.

A Calculate

Write each quotient in the answer space.

01 **48 ÷ 0.6** = _____

02 **7.2 ÷ 0.3** = _____

03 **5.25 ÷ 0.5** = _____

04 **3.6 ÷ 1.2** = _____

05 **0.84 ÷ 0.07** = _____

06 **18.9 ÷ 0.9** = _____

07 **2.4 ÷ 0.08** = _____

08 **0.945 ÷ 0.15** = _____

09 **6.72 ÷ 2.1** = _____

10 **0.756 ÷ 0.12** = _____

B Put it into context

Show your working and include units where needed.

11 A jug holds 3.6 litres of squash. Each cup holds 0.15 litres. How many full cups can be filled?

12 A 7.5 metre length of ribbon is cut into pieces 0.6 metres long. How many full pieces can be cut, and how much ribbon is left?

13 A 2.4 kg bag of coffee beans costs £18.00. What is the cost per kilogram? Give your answer in £ per kg.

C Explain your thinking

Use place-value language.

Mina changes 6.4 ÷ 0.8 into 64 ÷ 8. Explain why this keeps the quotient unchanged.

Check that your quotient makes sense.