

Year 5 Problems

A piece of string is 2.90m long.

How many 7cm lengths of string can be cut from the piece?

Model answer

I will start by converting one of the measurements, so they are both in the same unit of measurement.

I shall convert 2.90m to cm.

$$100\text{cm} = 1\text{m}$$

I must multiply 2.9 by 100

$$2.9 \times 100 = 290$$

$$2.9\text{m} = 290\text{cm}$$

I now need to divide 290 by 7

I shall estimate first:

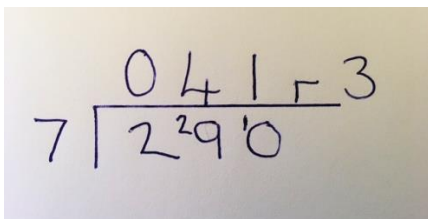
$$10 \times 7 = 70$$

$$20 \times 7 = 140$$

$$40 \times 7 = 280$$

So I estimate the answer to the problem as a bit more than 40 lengths of string.

I will now divide 290 by 7 using short division


$$\begin{array}{r} 41 \text{ r } 3 \\ 7 \overline{) 290} \end{array}$$

The answer to the calculation is 41 remainder 3. So 41 lengths of string with a remainder of 3 cm of string.

The answer to the problem is 41 lengths of string.

Now try these problems.

If the length of string was 1.85m how many 7cm lengths could be cut from it?

Space for working

If the length of string was 1.85m how many 9 cm lengths could be cut from it?

Space for working

Answers:

26 x 7cm lengths

20x 9cm lengths