

L.I. Can I solve problems using related calculations?

Watch the video on related calculations

<https://whiterosemaths.com/homelearning/year-3/week-1-number-multiplication-division/>

Now answer the questions on today's activity sheet.

Think about the important information in the question.

There are 12 jugs and the total is £240

So if this was a number sentence it could look like this...

$$12 \times \underline{\quad} = 240$$

Or

$$240 \div 12 =$$

Let's think about the related calculations that we know that will help us work this out...

I know...

$$12 \times 2 = 24 \quad \text{or that } 24 \div 12 = 2$$

So

$$12 \times 20 = 240 \quad \text{and } 240 \div 12 = 20.$$

This means that each jug cost £20.

Let's check our answer.

$$12 \text{ jugs cost } \pounds 20 \quad 12 \times 20 = \pounds 240$$

Mr Jones buys 12 large jugs.
The total cost of the jugs is £240
How much does each jug cost?

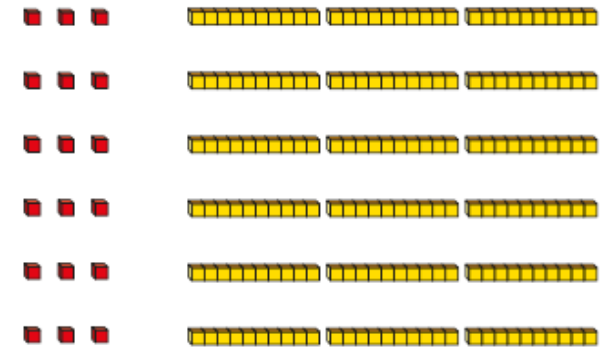
Each jug costs

How did you work this out?

Now try these...

Scott uses base 10 to make two related calculations.

Use the base 10 to complete Scott's calculations.



$$6 \times 3 = \square$$

$$6 \times 30 = \square$$

How does the answer to the first calculation help you work out the second calculation?

True or false?

$$5 \times 30 = 3 \times 50$$

Prove it.



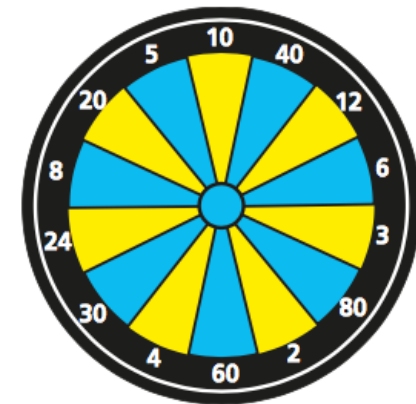
I know that when multiplying 3 by 40, 40 is ten times bigger than 4, so my answer will be ten times bigger than 3×4

Is Mo correct?
Explain your answer.

Huan throws two darts at the dartboard.
He multiplies the numbers he hits together.
Huan's score is 240

What two numbers could the darts have landed in?

and



How many different answers can you find?