

Is it easier to multiply a fraction or find a fraction of an amount?

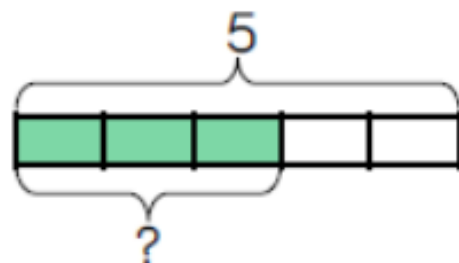
Does it depend on the whole number you are multiplying by?

Jenny has calculated and drawn a bar model for two calculations.

$$5 \times \frac{3}{5} = \frac{15}{5} = 3$$



$$\frac{3}{5} \text{ of } 5 = 3$$



What's the same and what's different about Jenny's calculations?

Now try these:

4 lots of $\frac{1}{5} =$

6 lots of $\frac{1}{3} =$

5 lots of $\frac{1}{10} =$

6 lots of $\frac{1}{12} =$

4 lots of ____ = 100

3 lots of ____ = 27

5 lots of 3.5 =

6 lots of 0.3 =

$\square \times \frac{2}{3} = \frac{2}{3}$ of 18 = 12

$\square \times \frac{1}{3} = \frac{1}{3}$ of $\square = 20$

Mrs Wingfield and Ms Baldwin's groups to have a go at these q's for an extra challenge.

Which calculations are easier to multiply the fractions, and which are easier to find the fraction of an amount?

Explain your choice for each one.

$$25 \times \frac{3}{5} \text{ or } \frac{3}{5} \text{ of } 25$$

$$6 \times \frac{2}{3} \text{ or } \frac{2}{3} \text{ of } 6$$

$$5 \times \frac{3}{8} \text{ or } \frac{3}{8} \text{ of } 5$$

Jamie and Sam are thinking of a two-digit number between 20 and 30

Jamie finds two thirds of the number

Sam multiplies the number by $\frac{2}{3}$

Their new two-digit number has a digit total that is one more than that of their original number

What number did they start with?

Show each step of their calculation.