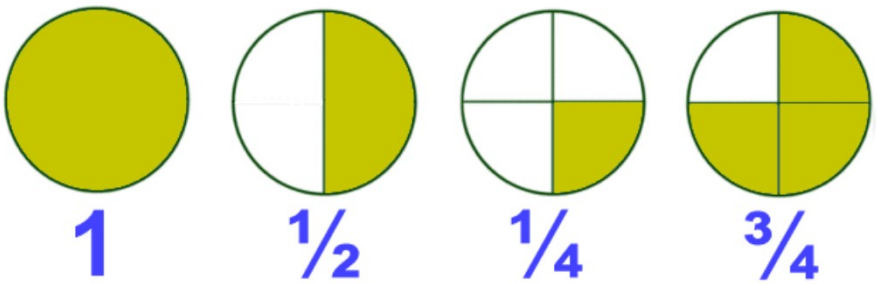
Monday

8.2.21

TBAT show fractions of quantities

Fractions can show numbers that are smaller than (or parts of) 1.

For example:

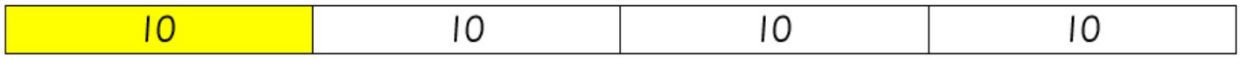


8.2.21
TBAT show fractions of quantities

Fractions can also show us parts of different numbers or quantities.

For example, ¼ of 40:

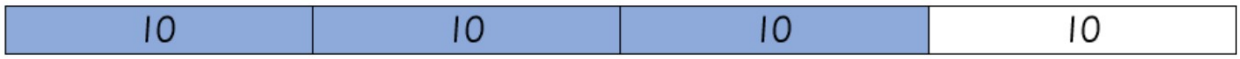
¼ of 40 = 10



40

Or ¾ of 40:

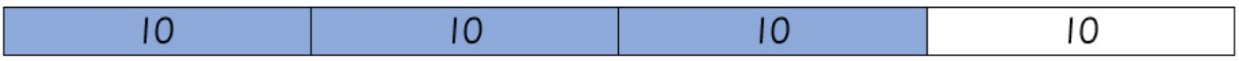
¾ of 40 = 30



8.2.21
TBAT show fractions of quantities

Or ¾ of 40:

¾ of 40 = 30



For this fraction, the 'whole' is 40.

To find 3/4 of 40, we first need to find 1/4 - we can do this by dividing 40 into 4 even pieces.

Now we know that each 'piece' is 10, to get 3/4 we need 3 of these, which gives us 30.

8.2.21

TBAT show fractions of quantities

Some more examples:

4/5 of 20 = 16

7/10 of 200 = 140

Tuesday

9.2.21
TBAT calculate fractions of quantities

We can use multiplication and division methods that we know to help us solve fractions of quantities questions:

For example 3/4 of 96:

We can find 1/4 of 96 by doing 96 ÷ 4 first:

$$4 \overline{)\,96} = 24$$

Then we can multiply this by 3 to find 3/4

$$24 \times 3 = 72$$

9.2.21
TBAT calculate fractions of quantities

The easiest way to find a fraction of a quantity is to:

- Divide by the denominator (bottom number of the fraction)
- Multiply by the numerator (top number of the fraction)

3/4 of 96 = 72

96 ÷ 4 = 24
24 × 3 = 72

Wednesday

10.2.21

TBAT calculate fractions of money

10.2.21
TBAT calculate fractions of money

We can use the methods we have already learnt to help us calculate fractions of money.

When calculating fractions of money, we may get a decimal answer. This is because we have pounds and pence. For example:

1/2 of £5 = £2.50

3/4 of £10 = £7.50

10.2.21
TBAT calculate fractions of money

Here's how we coud calculate 2/5 of £4:

Finding 1/5:

£4 ÷ 5 =
(This looks a bit tricky at first, but if we convert the pounds to pence it's much easier!)

400p ÷ 5 = 80p

Now finding 2/5:

80p x 2 = 160p = £1.60

2/5 of £4 = £1.60

£0.80	£0.80	£0.80	£0.80	£0.80

10.2.21

TBAT calculate fractions of money

Would you rather...? $\frac{3}{8}$ of £48 $\frac{3}{4}$ of £44 $\frac{5}{9}$ of £45

How will you find out which gives the biggest answer?

Thursday

11.2.21
TBAT solve problems involving fractions of quantities

Sarah entered a 100-word story competition. She wrote her story over two evenings. On the first evening, she wrote $\frac{6}{10}$ and on the second evening she wrote the rest.

a. How many words did she write on the first evening?
b. How many words did she write on the second evening and what fraction was this?

1. First, we would need to find 6/10 of 100, 1/10 would be 10, so 6/10 = 60
2. Because we know that 10/10 would be the same as the whole 100, we know that on the second evening she wrote 4/10 (as 6/10 + 4/10 = 10/10)
3. 4/10 of 100 = 40

11.2.21
TBAT solve problems involving fractions of quantities

Approaching word problems with...

Read
Read the question. What is the important information?

Understand
Understand the question. What do you need to find out?

Choose
Choose the correct method of calculation and operation(s).

Solve
Solve the problem. Make sure you follow the steps.

Answer
Answer the question. What were you meant to find out?

Check
Check your answer. Use the inverse to check your working out.