

Percent of a quantity – 10%, 25%, 50%

MODULE 3 · FRACTIONS, DECIMALS AND PERCENTAGES NUMBER

Per-cent means 'out of one hundred'. To find a percent of an amount, write the percent as a fraction with denominator 100, then multiply.

→ **10% of 80** → $10/100 \times 80 = 8$.

→ **25% of 80** → $25/100 \times 80 = 20$.

→ **50% of 80** → $50/100 \times 80 = 40$.

FIND 25% OF 80

① 25% means 25 out of 100, which simplifies to **1/4**.

② Find **1/4** of 80: divide by 4.

③ $80 \div 4 = 20$. So 25% of 80 = **20**.

HOW TO ANSWER TODAY

• **Percent of a quantity.** Find 10% first ($\div 10$) and build up, or find 1% ($\div 100$) and multiply.

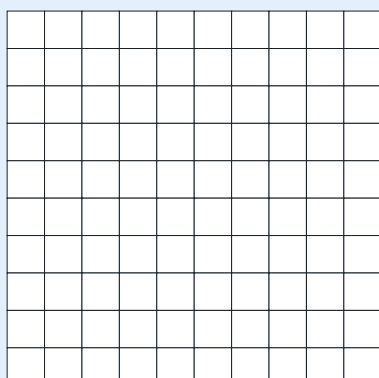
20% of 50 → 10% of 50 = 5, $\times 2 = 10$

• **Discount / increase.** Work out the percent of the price, then take it off (discount) or add it on (increase).

€80 with 15% off → 15% of €80 = €12 → €80 - €12 = €68

TRY IT ON THE LINE

Use the 100-grid as a model of the WHOLE. Shade the percent asked, then work out what that percent represents from the named quantity.



1. 10% of 80: shade 10 cells. $80 \div 10 = \underline{\quad}$ → 10% of 80 =

2. 25% of 80: shade 25 cells. → 25% of 80 =

3. 50% of 80: shade 50 cells. → 50% of 80 =

4. Stretch: 75% of 80 — shade and work out.

PRACTICE

① The SuperValu near Niamh's school has **280** loaves of bread delivered on Monday morning. By lunchtime, **75%** of the loaves have been sold. How many loaves have been sold?

What is 75% of 280?

② The corner shop near the school has **620** lollipops in a big jar by the till. The shopkeeper says **20%** of them are strawberry flavour. How many strawberry lollipops are in the jar?

What is 20% of 620?