### nümerise

### Core

- **1:** What is 19% of 43?
- **2:** Calculate 9% of 71
- 3: Work out 131% of  $93\,m$
- 4: Work out 16.5% of 154 kg
- 5: A computer costs  $\pounds 986$ . A tax of 18.5% is then added to the cost of the computer.

Work out the amount of tax that is added to the cost of the computer.

#### **Extension**

- 1: A recent survey showed that exactly 38% of people in a town buy the local newspaper. There are 2450 people in the town.
  - a) How many people in the town buy the local newspaper?b) How many people in the town **do not** buy the local newspaper?
- 2: Alana and Harrison played 60 games of rock-paper-scissors. Alana won 45% of the games and Harrison won 20% of the games.

How many games did they draw?

3: Work out 0.3% of  $\pounds 13,750$ 

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4: Ethan did a maths test marked out of 80 and got 92.5% correct. He also did an English test marked out of 64 and got 18.75% correct.

How many more marks did Ethan get in the maths test than the English test?



5: There are 1800 pupils in a school. 20% of the pupils are in Year 7. 55% of the Year 7 pupils are boys.

How many Year 7 boys are there in the school?

### Challenge

1: Alayna is paid  $\pounds 850$  per month. Each month she spends 68% of her pay and saves the rest.

How many months will it take Alayna to save  $\pounds 4624?$ 

2: There are 33 motorbikes, 61 vans and 246 cars on a ferry.

 $60\ \mathrm{more}\ \mathrm{vehicles}\ \mathrm{board}\ \mathrm{the}\ \mathrm{ferry}\ \mathrm{at}\ \mathrm{Seatown}\ \mathrm{and}\ \mathrm{none}\ \mathrm{leave}.$ 

Now 23% of the vehicles on the ferry are vans.

How many of the 60 vehicles that boarded at Seatown were vans?

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3: 26% of a value is  $\pounds 65$ .

What is the original value?

4: 8% of a length is  $360 \,\mathrm{m}$ .

What is the original length?

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Year 8

### Core:

- 1. 8.17
- 2. 6.39
- 3. 121.83 m
- 4. 25.41 kg
- 5. £182.41

#### Extension:

- 1. a) 931 people
  - b) 1519 people
- 2. 21 games
- 3. £41.25
- 4. 62 marks
- 5. 198 pupils

### Challenge:

- 1. 17 months
- 2. 31 vans
- 3. £250
- 4. 4500 m



Answers