## Find a percentage of a given amount using a calculator

**1** Complete the calculations.

Show your working.

**a)** 36% of £240 = ☐         **b)** 79% of £56 = ☐

**2** Tick the calculation that cannot be used to find 83% of £542

| 542 ÷ 100 × 83 | 83 × 542 ÷ 100 |

| 542 ÷ 83 × 100 | 0.83 × 542 |

Explain your answer.

_____

_____

**3** Write <, > or = to make the statement correct.

84% of 50 ◯ 50% of 84

Explain your answer.

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**4** In 2011, the population of Leeds was 474,632

The population of Leeds has now increased.

A web page states, "The population of Leeds has increased by 17%."

Is it possible for the population to have increased by **exactly** 17%?

Explain your answer.

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_____

**5** Calculate 37% of 2 m.

Give your answer in centimetres.

☐ cm

**6** Dani is buying a bike.

She finds the same bike in two different shops.

**Bike World £106** Price does not include VAT

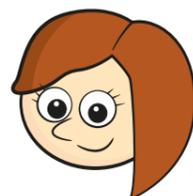*Fast Bikes* **£125.99** Price includes VAT

The rate of VAT is 20%.

In which shop would it be cheaper to buy the bike? Show your working.

_____

**7** Rosie and Jack are calculating 99% of £250

Jack: You need to use a calculator for this as they are large numbers.

Jack

Rosie: I think it's possible to use a mental method for this.

Rosie

Which mental method might Rosie use?

**8** In 2007, the value of a house was £119,995

From 2007 to 2018, house prices decreased by 9.4%.

How much has the value of the house decreased by?

**9** A car salesman earns commission for each car he sells.

The commission is a percentage of his monthly salary, based on the values of the cars he sells.

Here is a table of his commissions.

| Car value | Commission |
|-----------|------------|
| < £15,000 | 2.3% of salary |
| ≥ £15,000 | 5.7% of salary |

His monthly base salary is £1,208

**a)** How much commission does he earn from selling 1 car for less than £15,000?

**b)** How much commission does he earn for selling 6 cars, each for less than £15,000?

**c)** How much commission does he earn for selling 7 cars, each for more than £15,000?

**d)** In January, he sells 6 cars that cost less than £15,000 and 7 cars that cost more than £15,000

How much does he get paid that month?

He gets paid

**10** Mr Jones wants to put £850 into a bank account.

He looks at the interest rates from two different banks.

**Bank Central**

**First year:**
3% of the original amount deposited

**Second year:**
1.5% of the total amount at the end of year 1

**Bank Happy**

**First year:**
0.5% of the original amount deposited

**Second year:**
4% of the total amount at the end of year 1

At the end of 2 years he wants to have made as much money as possible.

Which bank should Mr Jones use? _____

Explain your answer.

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