

1. This formula is used to change a volume from US gallons to litres.

$$\text{Number of litres} = \text{Number of US gallons} \times 3.78541$$

One barrel of oil is 42 US gallons.

Work out 42 US gallons in litres.

Give your answer to the nearest litre.

..... litres

2. Here is some information on the cost of using Smarter Homes delivery service.

### Smarter Homes Delivery Cost

£20.00 plus £1.00 for each mile more than 12 miles from the store

Hasan orders a delivery 18 miles from the Smarter Homes store.

Work out the total delivery cost.

£ .....

3. Here is the price list for sailing lessons.

### Harbour Sail Club Lessons

First four lessons    £15.00    each lesson

All other lessons    £12.00    each lesson

Jonty has 10 lessons.

Work out the total cost of the 10 lessons.

£ .....

Turn over for more questions and answers.

4. Here is a formula to work out the amount a plumber charges.

$$\text{Total charge} = \text{£}80 \times \text{number of hours} + \text{call out charge}$$

Here is a table to show the call out charge at different times.

Time of call out	07:00 - 17:00	17:01 - 22:00	22:01 - 24:00	00:01 - 06:59
Call out charge	£30	£75	£120	£210

Paulina calls out a plumber at 02:00 and the plumber takes 3 hours to fix the leak.  
Work out the total charge Paulina has to pay the plumber.

£ .....

5. You can use this formula to work out the volume of a prism.

$$\text{Volume} = \text{Cross sectional area} \times \text{length}$$

Jac has a glass prism.

The cross sectional area of the prism is  $3.9 \text{ cm}^2$ .

The prism is 6 cm long.

Work out the volume of the glass prism.

.....  $\text{cm}^3$

6. You can use this rule to work out the total wage of a house keeper at a hotel.

$$\text{£}7.50 \text{ per hour plus tips}$$

One day Poppy worked as a house keeper for 6 hours and got £22.50 tips.

Work out Poppy's total wage for that day.

£ .....

Answers 1) 159 2) 26 3) 132 4) 450 5) 23.4 6) 67.50