CONVERSION AND UNITS

Pearson Edexcel - Wednesday 8 November 2017 - Paper 3 (Calculator) Higher Tier

1.

2 In London, 1 litre of petrol costs 108.9p
   In New York, 1 US gallon of petrol costs $2.83

   1 US gallon = 3.785 litres
   £1 = $1.46

   In which city is petrol better value for money, London or New York?
   You must show your working.

(Total for Question 2 is 3 marks)

Pearson Edexcel - Friday 6 November 2015 - Paper 2 (Calculator) Higher Tier

2.

4 There are 18500 gallons of fuel in a fuel tank.

The fuel is pumped from the fuel tank into a plane at a rate of 1700 litres per minute.

1 gallon = 4.5 litres.

How many minutes will it take to empty the fuel tank completely?
Give your answer to the nearest minute.

.... minutes

(Total for Question 4 is 3 marks)

Pearson Edexcel - Friday 6 November 2015 - Paper 2 (Calculator) Higher Tier

3.

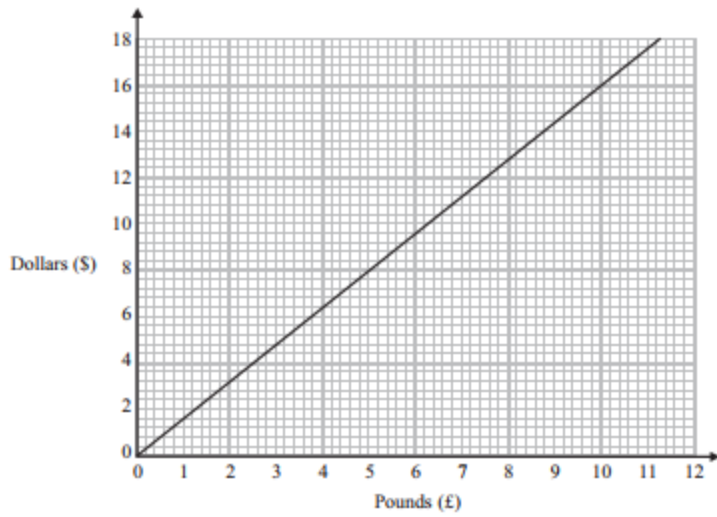6 A rectangle has an area of $4\,m^2$.

Write this area in cm^2.

.... cm^2

(Total for Question 6 is 2 marks)

Pearson Edexcel - Thursday 28 February 2013 - Paper 1 (Non-Calculator) Higher Tier

4.

6 You can use this conversion graph to change between pounds (£) and dollars ($).

(a) Use the conversion graph to change £5 to dollars.

$ ....
(1)

Ella has $200 and £800
Her hotel bill is $600

Ella pays the bill with the $200 and some of the pounds.

(b) Use the conversion graph to work out how many pounds she has left.

£ ....
(4)

(Total for Question 6 is 5 marks)

Pearson Edexcel - Monday 14 November 2011 - Paper 4 (Calculator) Higher Tier
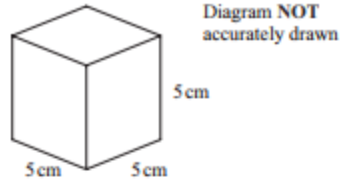
5.

18. Change 9 cm² to mm².

.... mm²
(Total 2 marks)

6.

9. (a) A solid cube has sides of length 5 cm.

Diagram **NOT** accurately drawn

5 cm

5 cm   5 cm

Work out the total surface area of the cube.
State the units of your answer.

....
(4)

The volume of the cube is 125 cm³.

(b) Change 125 cm³ into mm³.

.... mm³
(2)

The weight of the cube is 87 grams, correct to the nearest gram.

(c) (i) What is the minimum the weight could be?

.... grams

(ii) What is the maximum the weight could be?

.... grams
(2)
(Total 8 marks)

AQA GSCE – Thursday 8 June 2020 – Paper 3 (Calculator) Higher Tier

7.

18   The pressure in a tyre is 30 pounds per square inch.

Convert the pressure into kilograms per square centimetre.

> Use   1 pound = 0.45 kilograms
>
> and
>
> 1 inch = 2.54 centimetres

[3 marks]

_____

_____

_____

_____

_____

_____

_____

_____

Answer _____ kg/cm^2

AQA GSCE – Monday 24 May 2018 – Paper 1 (Non - Calculator) Higher Tier

8.

13   Circle the volume that is the same as 15 cm^3

[1 mark]

15 000 mm^3 1.5 mm^3 0.0015 mm^3 150 mm^3

9.

24   A tank is a cuboid measuring 50 cm by 35 cm by 20 cm
        All lengths are to the **nearest centimetre**.

        A container has a capacity of **exactly** 34 litres.
        1 litre = 1000 cm^3

        Which has the greater capacity?
        Tick **one** box.

        ☐ Tank   ☐ Container   ☐ Cannot tell

        Show working to support your answer.

                                                          [4 marks]

_____

_____

_____

_____

_____

_____

_____

_____

AQA GSCE – Tuesday 12 June 2018 – Paper 3 (Calculator) Higher Tier

10.

12

$$\text{pressure} = \frac{\text{force}}{\text{area}}$$

A force of 40 Newtons is applied to an area of 3.2 square metres.

Work out the pressure.
Give the units of your answer.

[2 marks]

_____

_____

Answer _____

AQA GSCE – Thursday 6 November 2017 – Paper 2 (Calculator) Higher Tier

11.

4   Which **one** of these is a unit of density?
Circle your answer.

[1 mark]

kg/m^2 m^2/kg kg/m^3 m^3/kg

AQA GSCE – Wednesday 25 May 2017 – Paper 1 (Non - Calculator) Higher Tier

12.

8 x km/h = y mph

Use   8 km/h = 5 mph   to write a formula for y in terms of x.

[2 marks]

Answer _____

AQA GSCE – Thursday 8 June 2017 – Paper 2 (Calculator) Higher Tier

13.

2   Circle the area that is equal to 36 mm^2

[1 mark]

360 cm^2 3600 cm^2 3.6 cm^2 0.36 cm^2

AQA GSCE – Sample Paper 1 (Non - Calculator) Higher Tier

14.

3   Circle the area that is the same as 5.5 m^2

[1 mark]

550 cm^2 5 500 cm^2 55 000 cm^2 5 500 000 cm^2