AQA, OCR, Edexcel

GCSE

GCSE Maths

Density and Pressure Answers

Name:

MME
Mathsmadeeasy.co.uk

Total Marks: /17

Density and Pressure

1. If a carton of juice weighs 0.9kg and it has a volume of 1.5 L, what is the density of the juice? Show your working
   - 0.6 Kg/L

(2 Marks)

2. A system has a pressure of 5 N/m^2. If a force of 2000N is applied, what is the area that the force is applied to? Please state your units.
   - 400 m^2

(3 marks)

3. Mercury has a density of 14 g/cm^3. How much would a sphere of mercury of radius 3 cm weigh.
   - 1583.4 g

(4 Marks)

4. The force applied to a 0.4m by 0.8m break pad produces a pressure of 500 N/m^2. Calculate the force applied to the break pad.
   - 1563 N

(3 Marks)

5. 6 jam jars of volume 0.37m^3 are filled with Jam. An empty jam jar has a weight 200g each. The weight of all 6 jars filled with jam 5400g. Use this information to calculate the density of Jam? (Hard)
   - 1892 g/m^3

(5 Marks)