## Dr Oliver Mathematics Worked Examples Mass, Density, and Volume 4

From: Edexcel GCSE Mathematics 2022 November Paper 3H (Calculator)

1. The pyramid $\mathbf{P}$ is formed from two parts made of different materials.


- The top part of $\mathbf{P}$ has a mass of 92.8 g and is made from material with a density of $2.9 \mathrm{~g} / \mathrm{cm}^{3}$.
- The bottom part of $\mathbf{P}$ has a mass of 972.8 g .
- The average density of $\mathbf{P}$ is $4.7 \mathrm{~g} / \mathrm{cm}^{3}$.

Calculate the volume of the top part of $\mathbf{P}$ as a percentage of the total volume of $\mathbf{P}$.
Give your answer correct to 1 decimal place.
You must show all your working.

