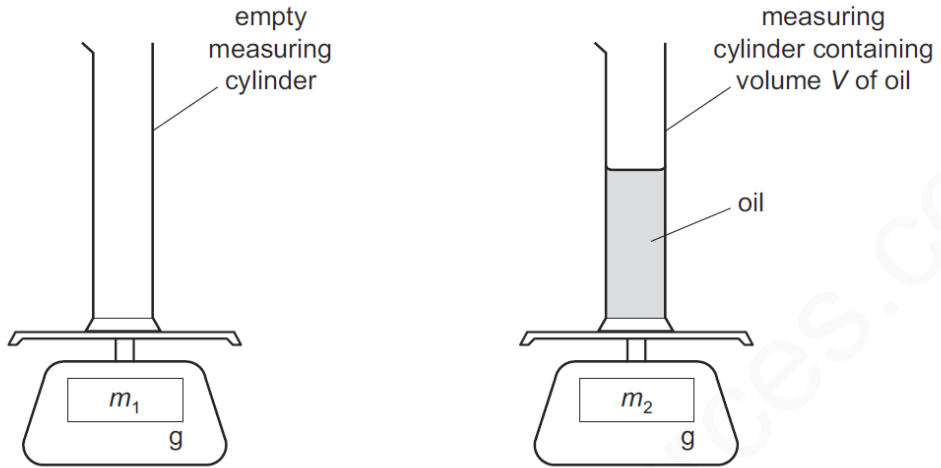


MEASURING DENSITY-SET-4

1 A student uses a measuring cylinder and a balance to find the density of oil. The diagram shows the arrangement used.



Which calculation gives the density of the oil?

- A** $\frac{V}{m_2}$ **B** $\frac{V}{(m_2 - m_1)}$ **C** $\frac{m_2}{V}$ **D** $\frac{(m_2 - m_1)}{V}$

MS-1

D

2 The diagrams show an empty container, and the same container filled with liquid.

The empty container has a mass of 120 g. When filled with the liquid, the total mass of the container and the liquid is 600 g.



empty container
120 g



container filled with liquid
600 g

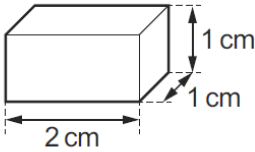
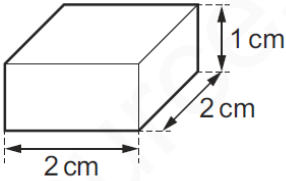
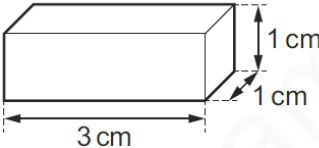
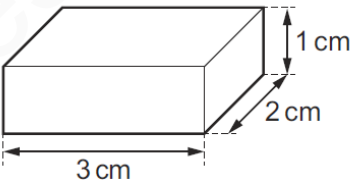
The volume of liquid in the container is 600 cm^3 .

What is the density of the liquid?

- A** 0.020 g/cm^3 **B** 0.80 g/cm^3 **C** 1.0 g/cm^3 **D** 1.2 g/cm^3

MS-2

B

3	<p>A liquid has a volume of 0.040m^3 and a mass of $30\,000\text{g}$.</p> <p>What is the density of the liquid?</p> <p>A 0.075kg/m^3 B 7.5kg/m^3 C 750kg/m^3 D 7500kg/m^3</p>
MS-3	C
4	<p>The diagram shows four blocks of different metals. Each block has a mass of 12g.</p> <p>Which metal has the largest density?</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>A</p>  </div> <div style="text-align: center;"> <p>B</p>  </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;"> <p>C</p>  </div> <div style="text-align: center;"> <p>D</p>  </div> </div>
MS-4	A