

National 5
Scheme - EF

Volumes of Solids

Homework Marking

1. $V = \frac{1}{3} \times \pi \times 8^2 \times 17$ 1 correct substitution
1140cm³ 1 answer correctly rounded
1 units

[3 marks]

2. $V = \frac{1}{3} \times \pi \times 5^2 \times 7$ 1 correct height
183cm³ 1 correct answer
 $V = \frac{2}{3} \times \pi \times 5^3$ 1 correct substitution
262cm³ 1 correct answer
Total: 445 cm³ 1 answer correctly rounded

[5 marks]

3. (a) $V = 15^3 = \underline{3380 \text{ cm}^3}$ [accept 3375] 1 dimension of 15
1 answer
(b) $V = \frac{4}{3} \times \pi \times 7 \cdot 5^3$ 1 substitution
1770cm³ 1 answer
Wasted space = 1610cm³ 1 answer correctly rounded

[5 marks]

4. $V = \frac{1}{3} \times A \times h$ 1 correct formula
 $V = \frac{1}{3} \times 6 \times 6 \times 9$ 1 substitution
110cm³ 1 answer correctly rounded

[3 marks]

Total: 16 marks