

## Volume and Surface Area Answers

$$1) a). 15 \times 6 = 90 \text{ cm}^2$$

$$b) 90 \times 7 = 630 \text{ cm}^3$$

$$2) a) \frac{1}{2} \times 2 \times 6 = 6 \text{ cm}^2$$

$$b). 6 \times 5 = 30 \text{ cm}^3$$

$$3) a). \pi \times 4^2 \times 12 = 192\pi = 603 \text{ cm}^3 \text{ (3st)}$$

$$b) \pi \times 8 \times 12 = 96\pi = 302 \text{ cm}^2 \text{ (3st)}$$

$$4) a) i). 8 \cdot 5^2 = 72 \cdot 25 \text{ cm}^2$$

$$ii) \pi \times 5^2 = 25\pi = 78 \cdot 5 \text{ cm}^2 \text{ (3st)}$$

$$b) i) 72 \cdot 25 \times 15 = 1083 \cdot 75 \text{ cm}^3 \text{ €}$$

$$25\pi \times 13 = 325\pi = 1020 \text{ cm}^3 \text{ (3st)}$$

$$ii). \text{Square based by } 62 \cdot 7 \text{ cm}^3 \text{ (3st)}$$

$$5) 2 \times \pi \times 3^2 + \pi \times 6 \times 10 = 78\pi = 245 \text{ cm}^2 \text{ (3st)}$$

$$6) a) \pi \times 2^2 \times 7 = 28\pi = 88 \cdot 0 \text{ cm}^3 \text{ (3st)}$$

$$b) 2 \times \pi \times 2^2 + \pi \times 4 \times 7 = 36\pi = 113 \text{ cm}^3 \text{ (3st)}$$

$$7) 9 \times 8 \times 12 + \frac{1}{2} \times 9 \times 7 \times 12 = 1242 \text{ cm}^3$$

$$8) \sqrt{\frac{242\pi}{8\pi}} = \frac{11}{2} = 5 \cdot 5 \text{ cm}$$