Question 20 continued

(1) Volume of cuboid

$= 4.2 \times 3.4 \times 2.2$

$= 31.32 \text{ m}^3$

(2) Volume of prism

$= \frac{1}{2} \times 3.2 \times 3.2 \times 3.2$

$= 10.24 \text{ m}^3$

(3) Total volume

$= 31.32 + 10.24$

$= 41.56 \text{ m}^3$

Question 21

(a) Volume of cylinder

$= \pi \times 1.5^2 \times 4.2$

$= 29.7 \text{ m}^3$ (1 dp)

(b) Volume of hemisphere

$= \frac{1}{2} \times \frac{4}{3} \times \pi \times 1.5^3$

$= 7.1 \text{ m}^3$ (1 dp)

(c) Total volume

$= 29.7 + 7.1$

$= 36.8 \text{ m}^3$ (1 dp)

Question 22

(a) Volume of prism

$= \frac{1}{2} \times 3.2 \times 3.2 \times 3.2$

$= 10.24 \text{ m}^3$

(b) Volume of cuboid

$= 3.2 \times 3.2 \times 2.2$

$= 22.528 \text{ m}^3$

(c) Total volume

$= 10.24 + 22.528$

$= 32.768 \text{ m}^3$

Question 23

(a) Volume of prism

$= \frac{1}{2} \times 1.2 \times 1.2 \times 2.5$

$= 1.8 \text{ m}^3$

(b) Volume of cylinder

$= \pi \times 1.2^2 \times 2.5$

$= 11.3 \text{ m}^3$ (1 dp)

(c) Total volume

$= 1.8 + 11.3$

$= 13.1 \text{ m}^3$ (1 dp)

Question 24

(a) Volume of cuboid

$= 2.5 \times 1.2 \times 1.2$

$= 3.6 \text{ m}^3$

(b) Volume of prism

$= \frac{1}{2} \times 1.2 \times 1.2 \times 2.5$

$= 1.8 \text{ m}^3$

(c) Total volume

$= 3.6 + 1.8$

$= 5.4 \text{ m}^3$

Question 25

(a) Volume of cylinder

$= \pi \times 1.5^2 \times 4.2$

$= 29.7 \text{ m}^3$ (1 dp)

(b) Volume of hemisphere

$= \frac{1}{2} \times \frac{4}{3} \times \pi \times 1.5^3$

$= 7.1 \text{ m}^3$ (1 dp)

(c) Total volume

$= 29.7 + 7.1$

$= 36.8 \text{ m}^3$ (1 dp)