

**Area and Volume (I)****Solution**

13. B

14. A

$$\begin{aligned}\text{volume} &= \frac{(5+9) \times 6}{2} \times 4 \\ &= 14 \times 3 \times 4 \\ &= 168 \text{ cm}^3\end{aligned}$$

15. B

$$\begin{aligned}\frac{4(2x+3x)}{2} \times 16 &= 512 \\ 5x &= 16 \\ x &= 3.2\end{aligned}$$

16. A

$$\begin{aligned}10 \times 10 + 10 \times 8 + 10x &= 240 \\ 10x &= 60 \\ x &= 6\end{aligned}$$

$$\begin{aligned}\text{volume} &= \frac{8x}{2} \times 10 \\ &= 4(6)(10) \\ &= 240 \text{ cm}^3\end{aligned}$$

17. D

If we combine all the lateral faces together, a rectangle is formed. The length of the rectangle is 6 cm and the width of the rectangle is the perimeter of the base.

Perimeter of the base

$$\begin{aligned}&= \frac{240}{6} \\ &= 40 \text{ cm}\end{aligned}$$