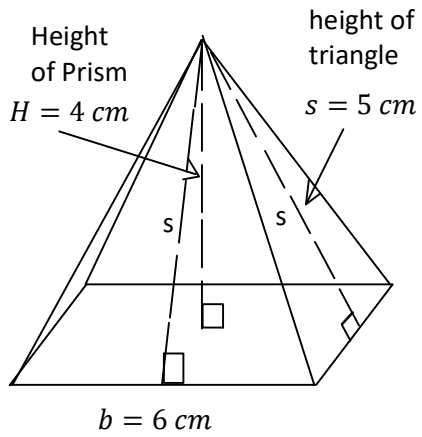


M10 - 2.2 - Square Pyramid Notes

Square Based Pyramid Surface Area and Volume



$$SA = 2bs + b^2$$

$$SA = 2(6)(5) + (6)^2$$

$$SA = 60 + 36$$

$$SA = 96\text{ cm}^2$$

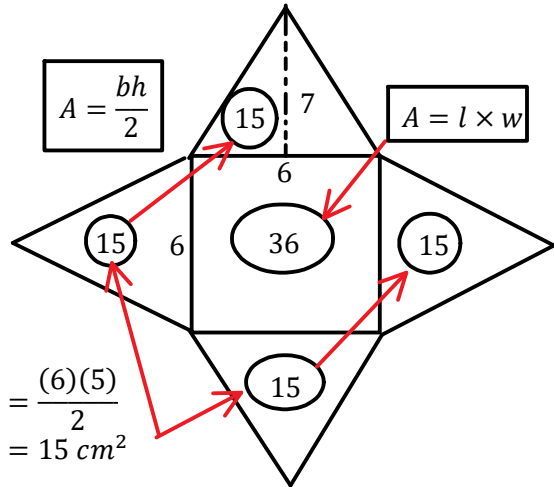
$$V = \frac{1}{3} \times (\text{area of base}) \times h$$

$$V = \frac{1}{3} \times (l \times w) \times h$$

$$V = \frac{1}{3} \times (6 \times 6) \times 4$$

$$V = 48\text{ cm}^3$$

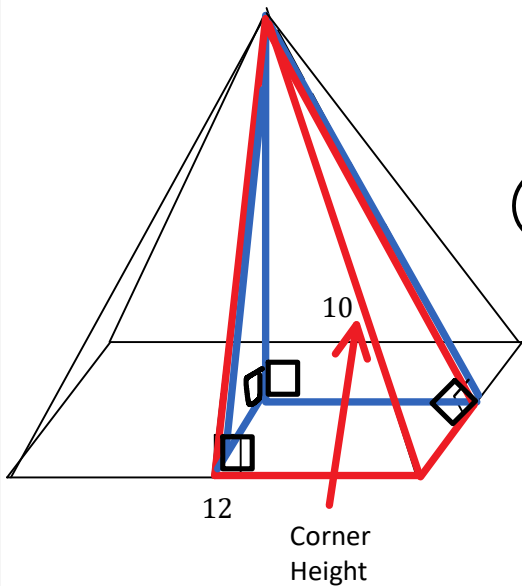
OR



$$SA = 15 + 15 + 15 + 15 + 36$$

$$SA = 96\text{ cm}^2$$

Pythagoras (Different than Above)



$$8$$

a

$$\sqrt{28} = 5.3$$

10
Corner
Height

a

8

c

6

$$a^2 + b^2 = c^2$$

$$a^2 + 6^2 = 8^2$$

$$a^2 + 36 = 64$$

$$-36 \quad -36$$

$$a^2 = 28$$

$$a = \sqrt{28}$$

$$a = \sqrt{28} = 5.3$$

$$a^2 + b^2 = c^2$$

$$a^2 + 6^2 = 10^2$$

$$a^2 + 36 = 100$$

$$-36 \quad -36$$

$$a^2 = 64$$

$$a = \sqrt{64}$$

$$a = 8$$