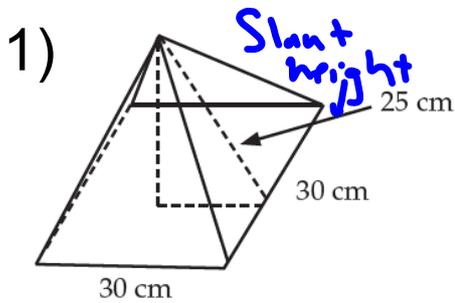
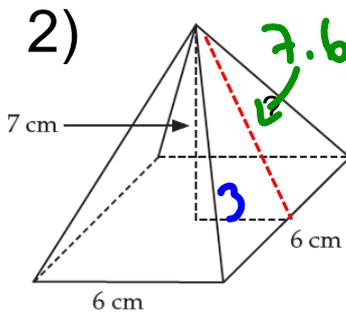


Lateral Area of Pyramids

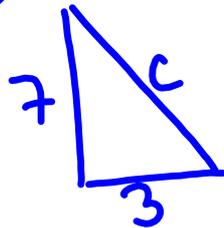
$$LA = \frac{\text{Perimeter of base} \times \text{slant height}}{2}$$



$$LA = \frac{(30 \cdot 4) \cdot 25}{2} = 1500 \text{ cm}^2$$



① Find the slant height.

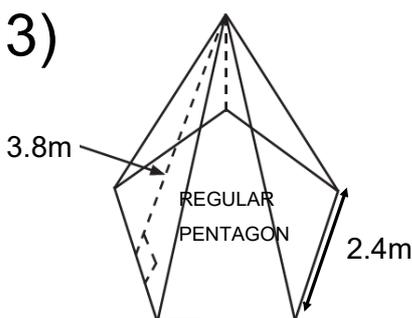


$$c^2 = 7^2 + 3^2$$

$$c^2 = 58$$

$$c = 7.62$$

$$\textcircled{2} LA = \frac{(4 \cdot 6) \cdot 7.62}{2} = 91.44 \text{ cm}^2$$

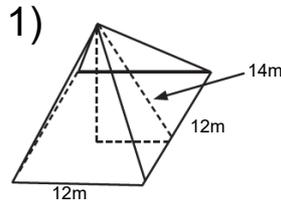


$$LA = \frac{(2.4 \cdot 5) \cdot (3.8)}{2} = 22.8 \text{ m}^2$$

Total Area of a Pyramid

$$TA = \frac{P_{base} \times \text{slant height}}{2} + A_{base}$$

Find the TA of the following:

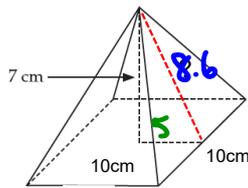


$$TA = \frac{(12 \cdot 4)(14)}{2} + (12)(12)$$

$$= 336 + 144$$

$$= 480 m^2$$

2)



① Slant height

$$c^2 = 7^2 + 5^2$$

$$c^2 = 74$$

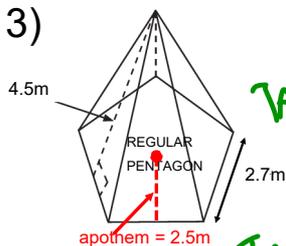
$$c = 8.6$$

②

$$TA = \frac{(10 \cdot 4)(8.6)}{2} + (10)(10)$$

$$= 272 cm^2$$

3)



$$TA = \frac{P_b \cdot h}{2} + \frac{P_b \cdot a}{2}$$

$$TA = \frac{(2.7 \cdot 5)(4.5)}{2} + \frac{5(2.7)(2.5)}{2}$$

$$= 30.375 + 16.88$$

$$= 47.255$$

$$\approx 47.26 m^2$$

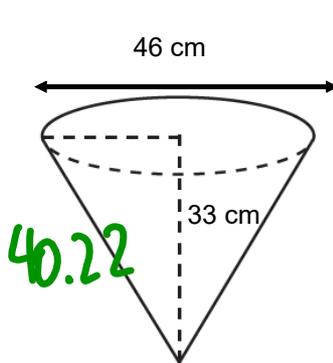
Lateral and Total Area of a Cone

$$LA = \pi r a$$

where a = apothem

$$TA = \pi r^2 + \pi r a$$

Find the lateral and total area of the following:



$$\textcircled{1} r = \frac{46}{2} = 23 \text{ cm}$$

$$\textcircled{2} \begin{array}{l} 23 \\ \text{C} \\ 40.22 \\ 33 \end{array} \quad \begin{array}{l} c^2 = 23^2 + 33^2 \\ c^2 = 1618 \\ c = 40.22 \end{array}$$

$$\begin{aligned} \textcircled{3} LA &= \pi r a \\ &= \pi (23)(40.22) \\ &= 2906.16 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{4} TA &= \pi (23)(40.22) + \pi (23)^2 \\ &= 2906.16 + 1661.9 \\ &= 4568.06 \text{ cm}^2 \end{aligned}$$