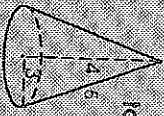


Solids

Right Circular Cones



$$\text{Volume} = \frac{1}{3} \cdot \pi \cdot (\text{radius})^2 \cdot (\text{height})$$

$$\text{lateral area} = \pi \cdot (\text{radius}) \cdot (\text{slant height})$$

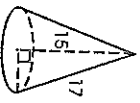
$$\text{total area} = (\text{lateral area}) + \pi \cdot (\text{radius})^2$$

$$V = \frac{1}{3} \cdot \pi \cdot (3)^2 \cdot (4) = 12\pi \text{ cubic units}$$

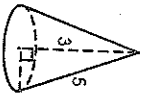
$$LA = \pi \cdot (3) \cdot (5) = 15\pi \text{ square units}$$

$$TA = 15\pi + \pi \cdot (3)^2 = 24\pi \text{ square units}$$

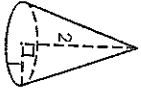
Find the volume, lateral area and total area of the following right circular cones.



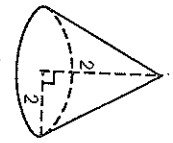
1.



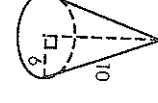
2.



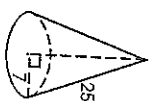
3.



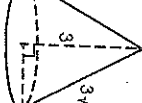
4.



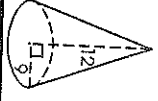
5.



6.



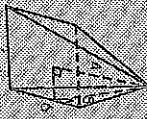
7.



8.

Solids

Pyramids



$$\text{Volume} = \frac{1}{3} \cdot (\text{area of base}) \cdot (\text{height})$$

$$\text{lateral area} = \frac{1}{2} \cdot (\text{perimeter}) \cdot (\text{slant height})$$

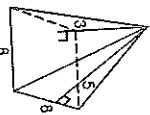
$$\text{total area} = (\text{lateral area}) + (\text{area of base})$$

$$V = \frac{1}{3} \cdot (6 \cdot 6) \cdot (4) = 48 \text{ cubic units}$$

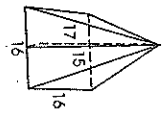
$$LA = \frac{1}{2} \cdot (6 + 6 + 6 + 6) \cdot (5) = 60 \text{ square units}$$

$$TA = 60 + (6 \cdot 6) = 96 \text{ square units}$$

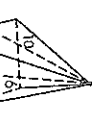
Find the volume, lateral area and total area of the following pyramids:



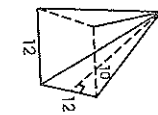
1.



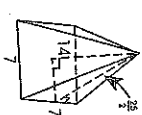
2.



3.



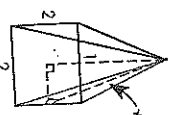
4.



5.



6.



7.