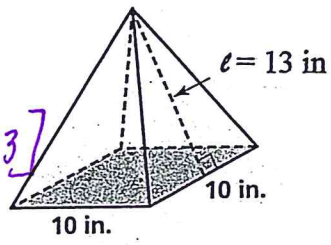
VOLUME AND SURFACE AREA TOOLKIT

In the space below, describe what you know about finding the Volume and Surface Area of Pyramids and Cones. Be sure to include examples and diagrams that will help you remember how to find the Volume and Surface Area of each Solid.

Surface Area of a Pyramid



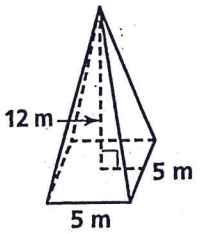
$SA = BA + LA$

$= 10^2 + 4\left[\frac{1}{2} \cdot 10 \cdot 13\right]$

$= 100 + 260$

$= 360 \text{ in}^2$

Volume of a Pyramid

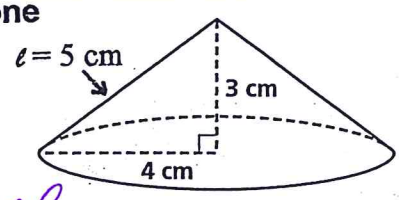


$V = \frac{1}{3} BA \cdot h$

$= \frac{1}{3}(5^2)12$

$= 100 \text{ m}^3$

Surface Area of a Cone

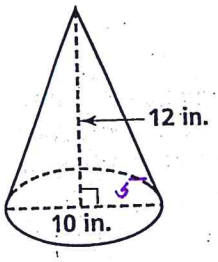


$SA = \pi r^2 + \pi r \ell$

$= 16\pi + 20\pi$

$= 36\pi \text{ cm}^2$

Volume of a Cone



$V = \frac{1}{3} \pi r^2 \cdot h$

$= \frac{1}{2}(25\pi)12$

$= 150\pi \text{ in}^3$