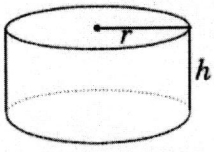
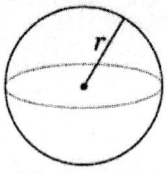
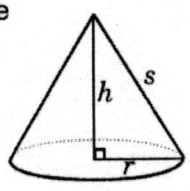
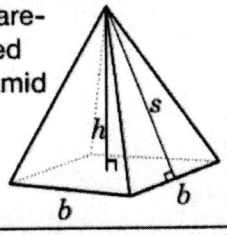
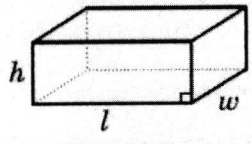
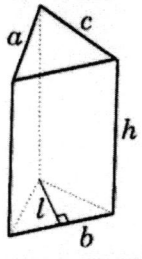
| Geometric Figure | Surface Area | Volume |
|---|---|---|
| Cylinder   | $A_{\text{base}} = \pi r^2$<br>$A_{\text{lateral surface}} = 2\pi rh$<br>$A_{\text{total}} = A_{\text{2 bases}} + A_{\text{lateral surface}}$<br>$= 2\pi r^2 + 2\pi rh$ | $V = (A_{\text{base}})(\text{height})$<br>$V = \pi r^2 h$ |
| Sphere   | $A = 4\pi r^2$ | $V = \frac{4}{3}\pi r^3$ or $V = \frac{4\pi r^3}{3}$ |
| Cone   | $A_{\text{lateral surface}} = \pi rs$<br>$A_{\text{base}} = \pi r^2$<br>$A_{\text{total}} = A_{\text{lateral surface}} + A_{\text{base}}$<br>$= \pi rs + \pi r^2$ | $V = \frac{(A_{\text{base}})(\text{height})}{3}$<br>$V = \frac{1}{3}\pi r^2 h$ or $V = \frac{\pi r^2 h}{3}$ |
| Square-based pyramid   | $A_{\text{triangle}} = \frac{1}{2}bs$<br>$A_{\text{base}} = b^2$<br>$A_{\text{total}} = A_{\text{4 triangles}} + A_{\text{base}}$<br>$= 2bs + b^2$ | $V = \frac{(A_{\text{base}})(\text{height})}{3}$<br>$V = \frac{1}{3}b^2 h$ or $V = \frac{b^2 h}{3}$ |
| Rectangular prism   | $A = 2(wh + lw + lh)$ | $V = (\text{area of base})(\text{height})$<br>$V = lwh$ |
| Triangular prism   | $A_{\text{base}} = \frac{1}{2}bl$<br>$A_{\text{rectangles}} = ah + bh + ch$<br>$A_{\text{total}} = A_{\text{rectangles}} + A_{\text{2 bases}}$<br>$= ah + bh + ch + bl$ | $V = (A_{\text{base}})(\text{height})$<br>$V = \frac{1}{2}blh$ or $V = \frac{blh}{2}$ |