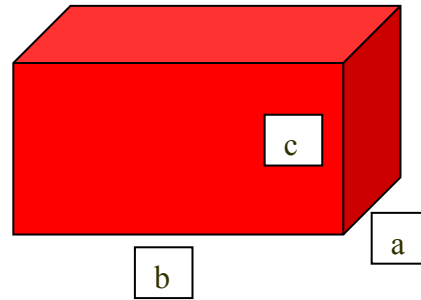




# MATH Bridge Memory Aid Useful Formulas



# Right Prism



**Lateral Area**

$$LA_{\text{right prism}} = \textit{perimeter of base} \bullet \textit{height}$$

**Total Surface Area**

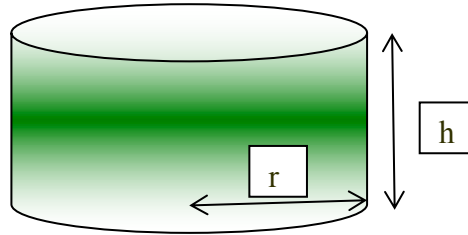
$$SA_{\text{right prism}} = 2ab + 2ac + 2bc$$

$$SA_{\text{right prism}} = LA + \textit{Area of bases}$$

**Volume**

$$V_{\text{right prism}} = A_{\text{base}} \bullet h$$

# Cylinder



Lateral Area

$$LA_{cylinder} = \text{Perimeter of base} \cdot h$$

$$LA_{cylinder} = 2\pi r \cdot h$$

Total Surface Area

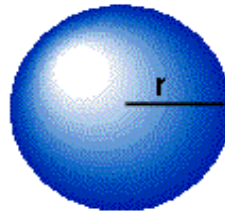
$$SA_{cylinder} = 2\pi r^2 + 2\pi rh$$

Volume

$$V_{cylinder} = A_{base} \cdot h$$

$$V_{cylinder} = \pi r^2 \cdot h$$

# Sphere



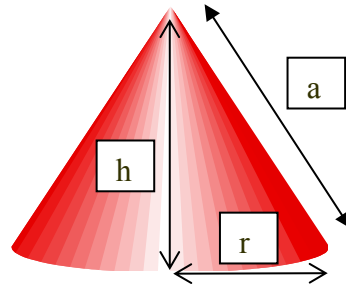
Total Surface Area

$$SA_{\text{sphere}} = 4\pi r^2$$

Volume

$$V_{\text{sphere}} = \frac{4\pi r^3}{3}$$

# Cone



Lateral Area

$$LA_{\text{cone}} = \pi r a$$

Total Surface Area

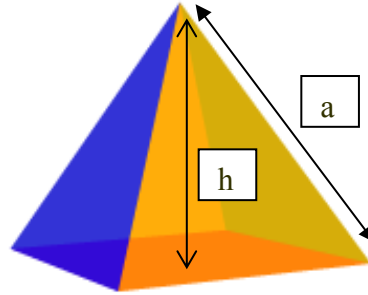
$$SA_{\text{cone}} = \pi r^2 + \pi r a$$

Volume

$$V_{\text{cone}} = \frac{\text{Area of base} \cdot h}{3}$$

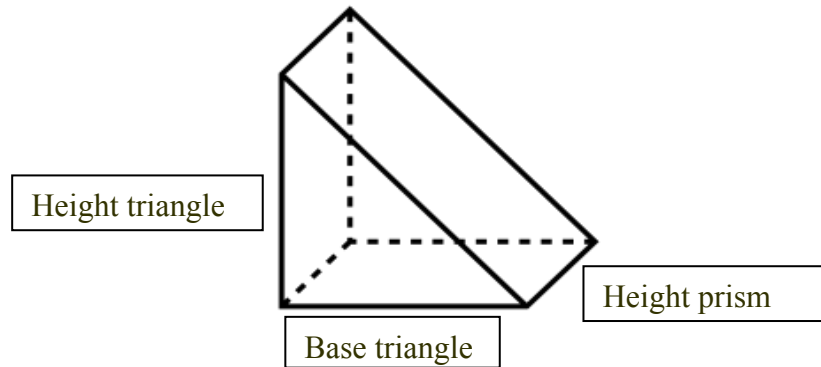
$$V_{\text{cone}} = \frac{\pi r^2 \cdot h}{3}$$

# Pyramid



Lateral Area	$LA_{\text{pyramid}} = \frac{\text{Perimeter of base} \bullet a}{2}$
Total Surface Area	$SA_{\text{pyramid}} = LA + \text{Area of bases}$
Volume	$V_{\text{pyramid}} = \frac{\text{Area of base} \bullet h}{3}$

# Triangular Prism



Volume

$$V_{\text{triangular prism}} = A_{\text{base triangle}} \cdot h$$
$$V_{\text{triangular prism}} = \frac{b \cdot h_{\text{triangle}}}{2} \cdot h$$