

Pre-Calculus Math 30S - Formula Sheet

$$A_{\text{circle}} = \pi r^2$$

$$C_{\text{circle}} = 2\pi r$$

$$A_{\Delta} = \frac{1}{2}bh$$

$$A_{\Delta} = \frac{1}{2}bc \sin A$$

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

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\text{midpt} = \left(\frac{x_2 + x_1}{2}, \frac{y_2 + y_1}{2} \right)$$

$$d = \frac{|Ax + By + C|}{\sqrt{A^2 + B^2}}$$

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$c^2 = a^2 + b^2 - (2ab)\cos C$$

$$\cos C = \frac{a^2 + b^2 - c^2}{2ab}$$

$$r_1 + r_2 = \frac{-b}{a}$$

$$r_1 \cdot r_2 = \frac{c}{a}$$

$$I = PRT$$

$$A = P\left(1 + \frac{r}{n}\right)^{nt}$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$(x - h)^2 + (y - k)^2 = r^2$$