

Formula Sheet
Grade 11 Pre-Calculus Mathematics (30S)

$$A = \pi r^2$$

$$A = bh$$

$$C = 2\pi r$$

$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}(b_1 + b_2)h$$

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

$$(r_1)(r_2) = \frac{c}{a}$$

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

$$d = \frac{|Ax_1 + By_1 + C|}{\sqrt{A^2 + B^2}}$$

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

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

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

$$y = mx + b$$

$$I = Prt$$

$$A = P(1 + r)^n$$

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

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

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

$$\text{Mill Rate} = \frac{\text{Total Tax to Be Raised}}{\text{Total Assessed Value of Property}} \times 1000$$

$$t_n = t_1 + (n-1)d$$

$$S_n = \frac{(t_1 + t_n)n}{2} = \frac{n}{2}[2t_1 + (n-1)d]$$

$$t_n = t_1 r^{n-1}$$