

## Foundations & Pre-Calculus Math 10 Formula Sheet

### Sequences, Series, & Interest

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

$$t_n = t_1 r^{n-1} \quad S_n = \frac{n}{2}(t_1 + t_n)$$

$$I = Prt$$

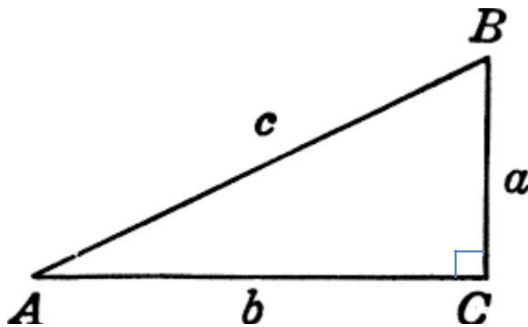
$$A = P(1 + r)^t$$

### Trigonometry

$$\sin \theta = \frac{\textit{opposite}}{\textit{hypotenuse}}$$

$$\cos \theta = \frac{\textit{adjacent}}{\textit{hypotenuse}}$$

$$\tan \theta = \frac{\textit{opposite}}{\textit{adjacent}}$$



$$a^2 + b^2 = c^2$$

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

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

### Linear Relations

$$y = mx + b$$

$$Ax + By + C = 0$$

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