

## Formulae Sheet

$$\text{Area of a triangle: } = \frac{bh}{2}$$

$$\text{Circumference of a circle: } = 2\pi r$$

$$\text{Area of a circle: } = \pi r^2$$

**NOTE:** Use the value of  $\pi$  programmed in your calculator rather than the approximation of 3.14.

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

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

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

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

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

$$S_n = \frac{n}{2}(a + t_n)$$

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

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

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