

## MCF 3M Exam Formulae Sheet

**Quadratic Functions:**

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

**Trigonometry:**

$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

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

$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$\cos A = \frac{b^2 + c^2 - a^2}{2bc}$$

**Finance:**

$$I = Prt$$

$$A = P + I$$

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

$$P = \frac{A}{(1+i)^n} \quad \text{or} \quad P = A(1+i)^{-n}$$

$$A = \frac{R[(1+i)^n - 1]}{i}$$

$$PV = \frac{R[1 - (1+i)^{-n}]}{i}$$