Waterloo-Oxford District Secondary School
Mathematics Department

Formulas

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

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

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

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

$$S_n = \frac{n}{2}[a + t_n]$$

$$t_n = ar^{n-1}$$

$$S_n = \frac{a(r^n - 1)}{r - 1}$$

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

$$PV = A(1+i)^{-n}$$

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

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

Reciprocal Identities:

$$\csc A = \frac{1}{\sin A}$$

$$\sec A = \frac{1}{\cos A}$$

$$\cot A = \frac{1}{\tan A}$$

Quotient Identity:

$$\tan\theta = \frac{\sin\theta}{\cos\theta}$$

Pythagorean Identity:

$$\sin^2\theta + \cos^2\theta = 1$$