

MATHEMATICS 20-2 FORMULA SHEET

Radicals

$$a^{\frac{m}{n}} = \sqrt[n]{a^m} \text{ or } (\sqrt[n]{a})^m$$

$$a^{-m} = \frac{1}{a^m}$$

$$(a^m)(a^n) = a^{m+n}$$

$$\frac{a^m}{a^n} = a^{m-n}$$

$$(a^m)^n = a^{mn}$$

$$(ab)^m = a^m b^m$$

$$\left(\frac{a}{b}\right)^m = \frac{a^m}{b^m}$$

$$a^0 = 1$$

Quadratics

Factored Form	$y = a(x-r)(x-s)$
Vertex Form	$y = a(x-h)^2 + k$
Standard Form	$y = ax^2 + bx + c$
Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ <p>Where a, b, and c are from $ax^2 + bx + c = 0$</p>

Trigonometry

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