Pre-Calculus 11 Formula Sheet

General form: $y = ax^2 + bx + c$

Standard form: $y = a(x-p)^2 + q$

Factored form: $y = a(x - x_1)(x - x_2)$

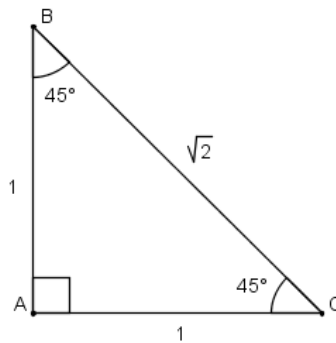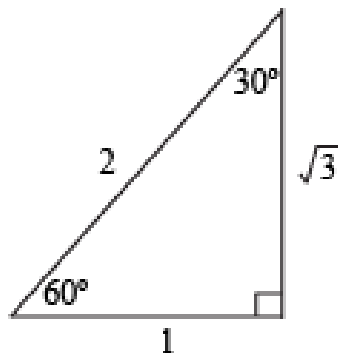Quadratic Formula: $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

For trig, remember to check that your calculator is in DEGREE mode

$Sin\theta = \dfrac{opposite}{hypotenuse}$ $Cos\theta = \dfrac{adjacent}{hypotenuse}$ $Tan\theta = \dfrac{opposite}{adjacent}$

Special Triangles:

Sine Law: $\dfrac{Sin\,A}{a} = \dfrac{Sin\,B}{b} = \dfrac{Sin\,C}{c}$

Cosine Law: $c^2 = a^2 + b^2 - 2abCosC$

Simple Interest: $I = prt$

Future Amount (Principle + Interest): $A = P+I$ or $A = P(1+rt)$

Compound Interest: $A = P\left(1 + \dfrac{r}{n}\right)^{nt}$