

**PHYSICS****FACTORIZING PRACTICE**

The Standard Form of a Quadratic

$$y = ax^2 + bx + c$$

The Quadratic Formula

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

Factor the Following Expressions:

$$0 = x^2 - x - 2$$

$$24 = x^2 + 5x$$

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In the case of projectile motion, the variable that we will be looking for is t (time). **Note:** *Time cannot be a negative value.*

Factor the Following Expressions for t :

$$0 = -4.9t^2 + 2t + 20$$

A ball is thrown vertically in the air off the top of a 20 m building with an initial velocity of 2m/s [up]. How long does it take to hit the ground below?