

**Practice Run**

Graph the quadratic functions corresponding to the following equations and determine the roots of the equations, using technology.

1. $3x^2 - 9x = 0$

2. $6x^2 + 5x + 12 = 4x^2 + 15$



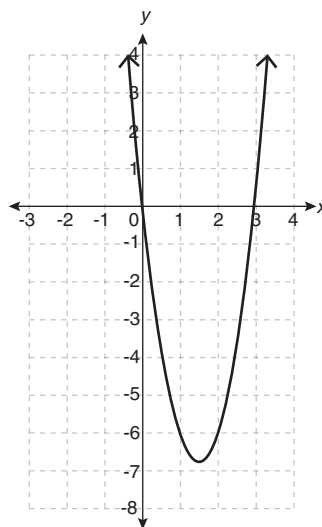
Compare your answers.

Graph the quadratic functions corresponding to the following equations and determine the roots of the equations, using technology.

1. $3x^2 - 9x = 0$

Graph $y = 3x^2 - 9x$ using technology and then find the x -intercepts.

The x -intercepts are $x = 0$ and $x = 3$, and therefore the roots of the equation $3x^2 - 9x = 0$ are also $x = 0$ and $x = 3$.



2. $6x^2 + 5x + 12 = 4x^2 + 15$

Rearrange the question $2x^2 + 5x - 3 = 0$.

Graph the function $y = 2x^2 + 5x - 3$ using technology and then find the x -intercepts.

The x -intercepts are $x = -3$ and $x = 0.5$ or $\frac{1}{2}$, and therefore the roots of the equation $2x^2 + 5x - 3 = 0$ are also $x = -3$ and $x = 0.5$ or $\frac{1}{2}$.

