1. Use the quadratic formula to solve each equation. Express answers as exact roots.

b) $2x^2 + 4x - 7 = 0$

c) $4x^2 - 12x + 9 = 0$

2. **Use Technology** Use the quadratic formula to solve. Express your answers as exact roots and as approximate roots, rounded to the nearest hundredth. Verify graphically with technology.

d) $10x^2 - 45x - 7 = 0$

e) $-5x^2 + 16x - 2 = 0$

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

2. Use two different methods to find the roots of $2(x-3)^2 - 11 = 0$ to two decimal places. Hint: convert to standard form and then use the quadratic formula is one way.

3. Find the roots of the following, if possible. Use the most appropriate method.

a) $x^2 - 8x = -16$

b) $2x^2 + 3x - 20 = 0$

c) $(x-5)^2 = 16$

d) $x^2 + 10 = 0$

e) $-2(x+1)^2 + 10 = 0$

f) $x^2 = 90 - 6x$

g) $-5x^2 + 15x = 11$

h) $3.2w^2 + 28.9w - 8.4 = 0$

i) $-4.9(t-4)^2 + 50 = 0$