NAME_____DATE_____PER._____

SIMPLIFYING RADICALS IN FORMULAS

Solve each equation using the quadratic formula. Leave your answer in simplified radical form.

1) $2x^2 + x - 6 = 0$ a = _____; b = _____; c = _____

2) $3x^2 + 4x = 10$ a = _____; b = _____; c = _____

3) $x^2 - x - 1 = 0$ a = _____; b = _____; c = _____

4) $x^2 + 4x = -3$ a = _____; b = _____; c = _____

Find the distance between the following sets of points.

5) (-4, 0) and (-1, -3)

$$d = \sqrt{(\quad - \quad)^2 + (\quad - \quad)^2}$$

6) (-3, 1) and (1, 5)

$$d = \sqrt{(\quad - \quad)^2 + (\quad - \quad)^2}$$

Simplify each radical expression.

5. $\sqrt{96}$

6. $2\sqrt{98}$

7. $-2\sqrt{12} \bullet 3\sqrt{6}$

8. $2x\sqrt{32x^5y^4}$

9. $\sqrt{\frac{7}{12}} \bullet \sqrt{\frac{1}{3}}$

10. $3\sqrt{2} + 7\sqrt{18}$