## **Assignment 15**

Simplify each radical expression where possible.

1.  $\sqrt{24}$ 

2.  $\sqrt{25}$ 

3.  $\sqrt{28}$ 

4.  $\sqrt{17}$ 

√12

6.  $\sqrt{36}$ 

7.  $\sqrt{18}$ 

8.  $\sqrt{27}$ 

## **Practice with Completing the Square**

Solve by the Completing the Square Method.

1.  $x^2 - 10x + 1 = 0$ 

2. 
$$x^2 + 6x - 9 = 0$$

3. 
$$x^2 + 12x + 8 = 0$$

Solve by the Completing the Square Method.

4. 
$$x^2 - 8x - 1 = 0$$

5. 
$$x^2 - 2x - 11 = 0$$

6. 
$$x^2 + 4x - 14 = 0$$

## Practice with "Just the x squared type"

Solve by isolating the squared term and taking plus or minus the square root.

1. 
$$2x^2 - 8 = 0$$

2. 
$$45 + x^2 = 5x^2 - 55$$

3. 
$$5x^2 + 3x - 16 = 3x + x^2$$

## **Never Too Early Review "Final Exam"**

1. Factor: 
$$x^2 + 14x + 24$$

2. Simplify: 
$$(5x^2 + 6x + 3) + (-8x - 3)$$

3. Simplify: 
$$(x^3 + x - 1) - (x^2 + 9x - 4)$$

4. Simplify: 
$$x^3 \cdot y^5 \cdot x^7$$

Find the sum in simplest form of 9,  $5\sqrt{2}$ , and  $\sqrt{8}$ 

6. Solve: 
$$-4 + \sqrt{x-7} = -1$$

7. Factor: 
$$4x^2 - 25$$

8. Factor completely: 
$$2x^3 + 5x^2 - 8x - 20$$