## **Multiplying Polynomials**

## Simplify:

1. 
$$(x + 3)(x - 7)$$

2. 
$$(2x - 4)(x + 6)$$

3. 
$$(-3x - 5)(2x - 9)$$

4. 
$$(x + 5)(x^2 + 4x + 8)$$

5. 
$$(x + 2)(3x^2 + 3x - 7)$$

6. 
$$(x - 1)(2x^2 - 6x - 4)$$

7. 
$$(4x - 2)(x + 6)(3x + 3)$$

8. 
$$(2x + 1)(3x + 2)(x + 5)$$

<u>Situation 1</u>: There is a square garden and the garden is going to be expanded in two directions.

The length and width of the garden are going to be expanded by 3 feet. What is the area of the resulting garden?

## Situation 2: Find the area of the shaded region.

