

Name \_\_\_\_\_

**LEARNING  
OUTCOMES**



- I can multiply polynomials.

**Lesson 1 Multiplying Polynomials Expressions:**

**YOU DO** 😊

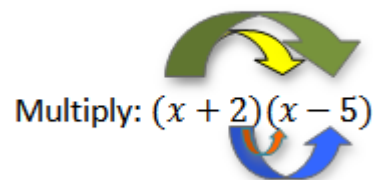
1. Multiply using both methods.  $(x + 2)(x - 5)$

Method 1

x            - 5

x		
2		

Method 2



2. Multiply using both methods.  $(x + 5)(x - 5)$

Method 1


Method 2

3. Square the binomial.  $(x + 8)^2$

4. Square the binomial.  $(a - b)^2$



1. Find the dimensions:

The measure of a side of a square is  $x$  units. A new square is formed with each side 6 units longer than the original square's side.

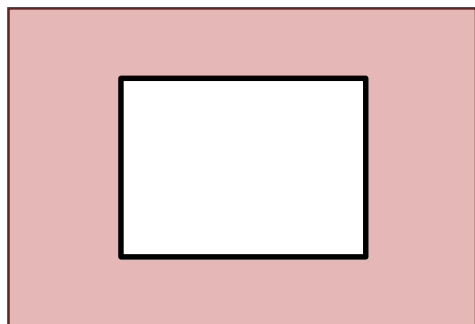
Write an expression to represent the area of the new square.



YOU DO 😊



In the accompanying diagram, the width of the inner rectangle is represented by  $x - 3$  and its length by  $x + 3$ . The width of the outer rectangle is represented by  $3x + 4$  and its length by  $3x - 4$ .



- Find the area of the larger rectangle.
- Find the area of the smaller rectangle.
- Express the area of the shaded region as a polynomial in terms of  $x$ .  
(Hint: You will have to add or subtract polynomials to get your final answer.)



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CW/Homework

**Multiply each pair of binomials**

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

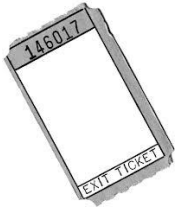
2.  $(x + 9)(x + 2)$

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

4.  $(4 - y)(4 + y)$

5.  $(k + 10)^2$

6. The width and length of a rectangle are  $(x + 3)$  and  $(x - 6)$  respectively. Express the area of the rectangle as a polynomial.



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Exit Ticket:



1. What is the product of  $(3x + 2)$  and  $(x - 7)$ ?

2. The expression  $(x - 6)^2$  is equivalent to

3. Multiply:  $(n - 5)(n + 5)$