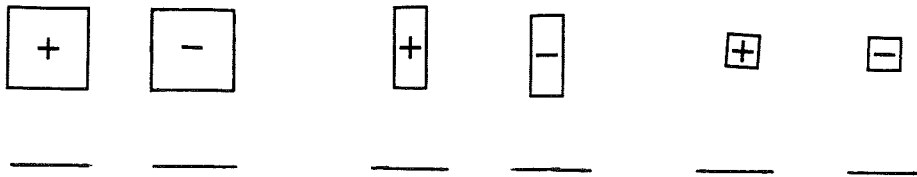


Algebra I

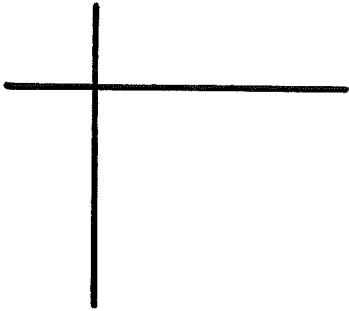
Notes 11.3, Part 2 Multiplying Polynomials using Algebra Tiles

Objective: Complete polynomial multiplication using Algebra Tiles.

Symbols:



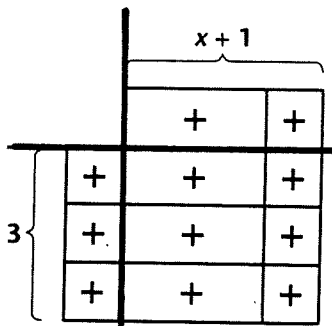
Model:



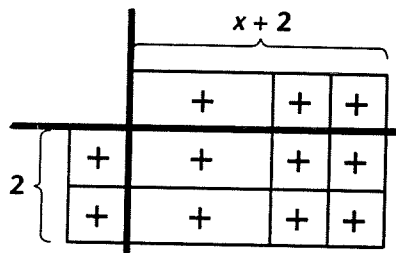
Colors: blue, green and yellow indicate \_\_\_\_\_; red indicates \_\_\_\_\_

A positive and a negative tile of the same size is equivalent to \_\_\_\_\_ and can be removed from the final product solution.

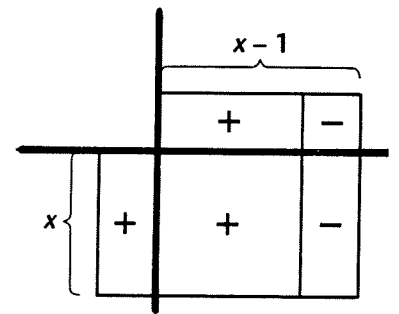
Examples:



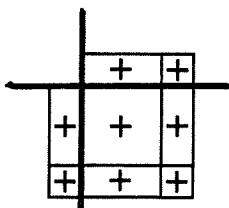
$3(x + 1) =$



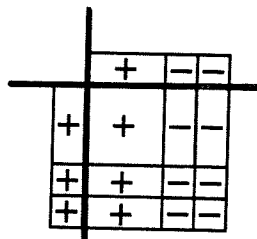
$2(x + 2) =$



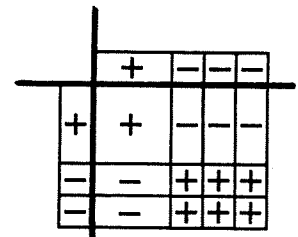
$x(x - 1) =$



$(x + 1)(x + 1) =$



$(x + 2)(x - 2) =$



$(x - 2)(x - 3) =$

Use algebra tiles to find each product.

1.  $2(x + 3)$  \_\_\_\_\_

2.  $3(2x - 2)$  \_\_\_\_\_

3.  $x(x - 3)$  \_\_\_\_\_

4.  $x(-x + 1)$  \_\_\_\_\_

5.  $x(2x + 4)$  \_\_\_\_\_

6.  $3(x + 2)$  \_\_\_\_\_

7.  $2x(x - 2)$  \_\_\_\_\_

8.  $2x(x + 2)$  \_\_\_\_\_

Use algebra tiles to find each product.

9.  $(x + 2)(x + 1)$  \_\_\_\_\_

10.  $(x + 2)(x - 1)$  \_\_\_\_\_

11.  $(x - 2)(x + 1)$  \_\_\_\_\_

12.  $(x - 2)(x - 1)$  \_\_\_\_\_

13.  $(x + 3)(x + 3)$  \_\_\_\_\_

14.  $(x - 3)(x - 3)$  \_\_\_\_\_

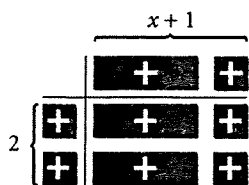
15.  $(x + 3)(x - 3)$  \_\_\_\_\_

16.  $(x - 3)(x + 3)$  \_\_\_\_\_

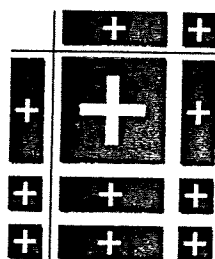
17.  $(x + 1)(2x + 3)$  \_\_\_\_\_

18.  $(x - 2)(2x - 1)$  \_\_\_\_\_

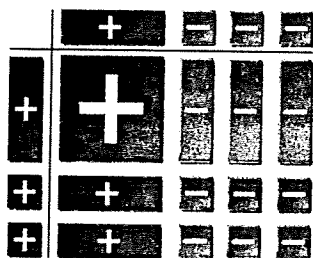
Write the factors and the product modeled by the tiles.



$2(x+1) =$  \_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_