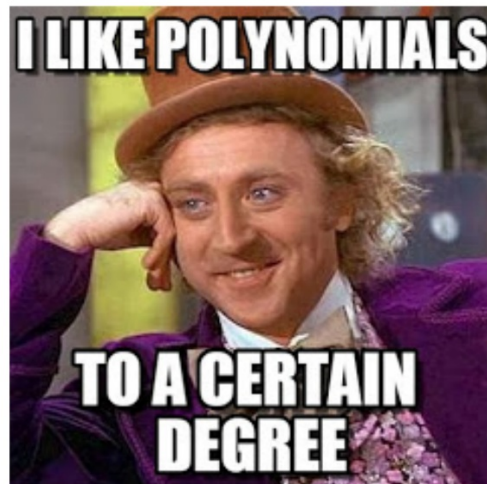


# MODELING MULTIPLICATION



# MULTIPLYING POLYNOMIALS

There are 3 methods we can use for multiplying binomials.

Monomial

One term

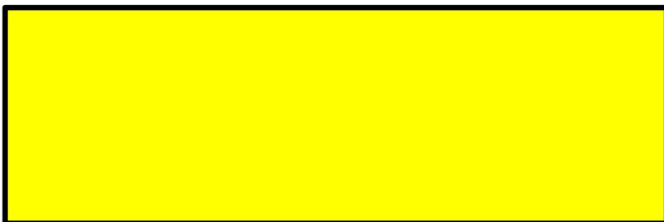
two terms

1. Algebra tiles
2. Punnett Square
3. Distributive property

**Remember:**

**An example of a binomial is**

$$3x + 4y$$

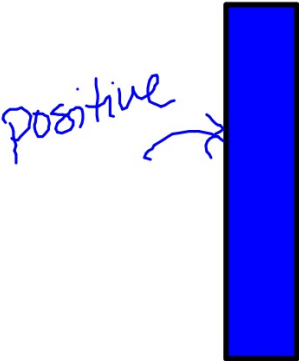


**Do you remember a multiplication table?**

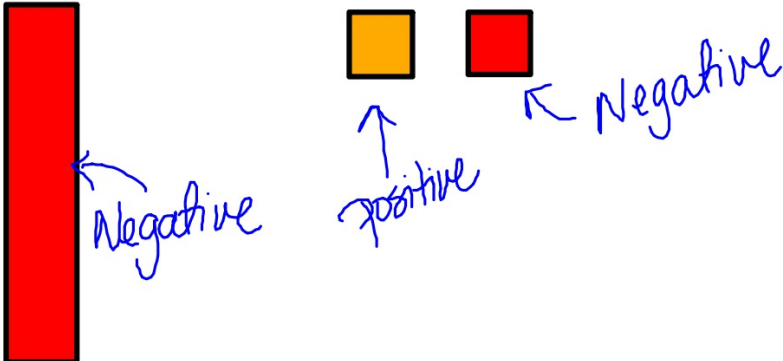
X	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5							35					
6												
7												
8												
9												
10												
11												
12												

**Let's keep that same concept and use algebra tiles**

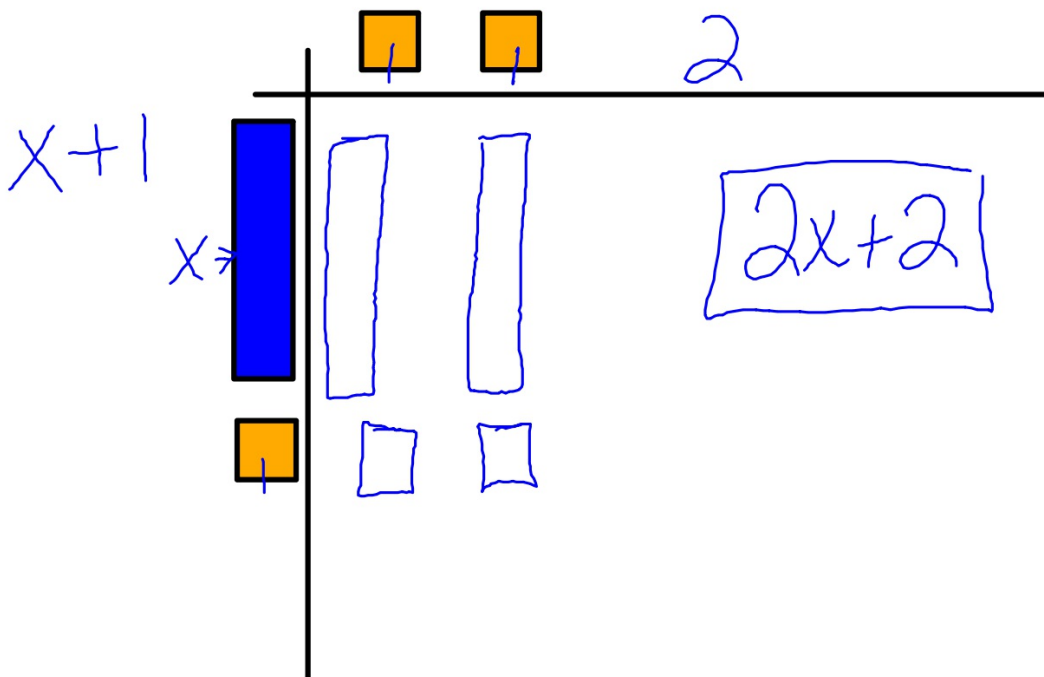
**Represent  $x$**

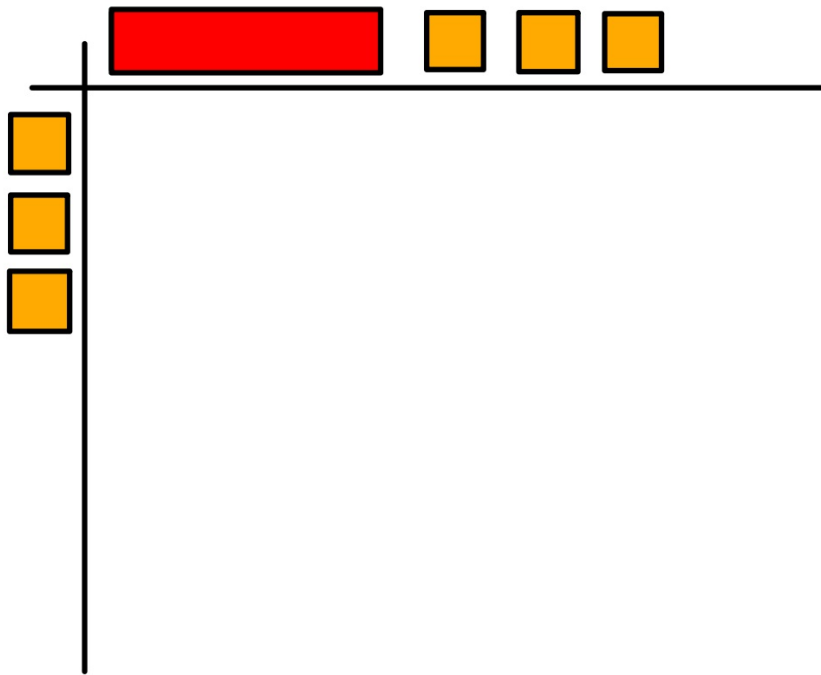


**Represent 1's**



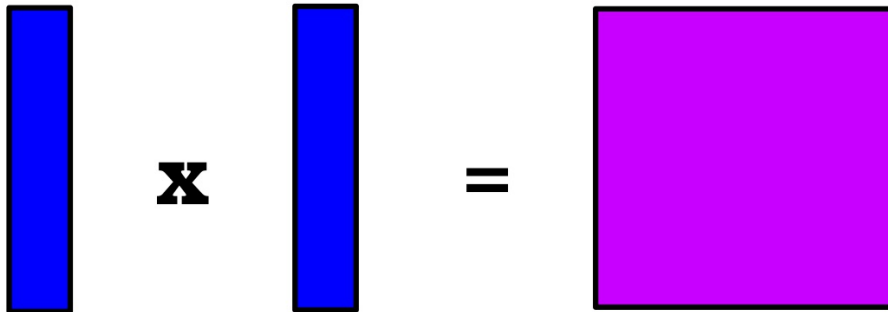
### Multiply using the algebra tiles

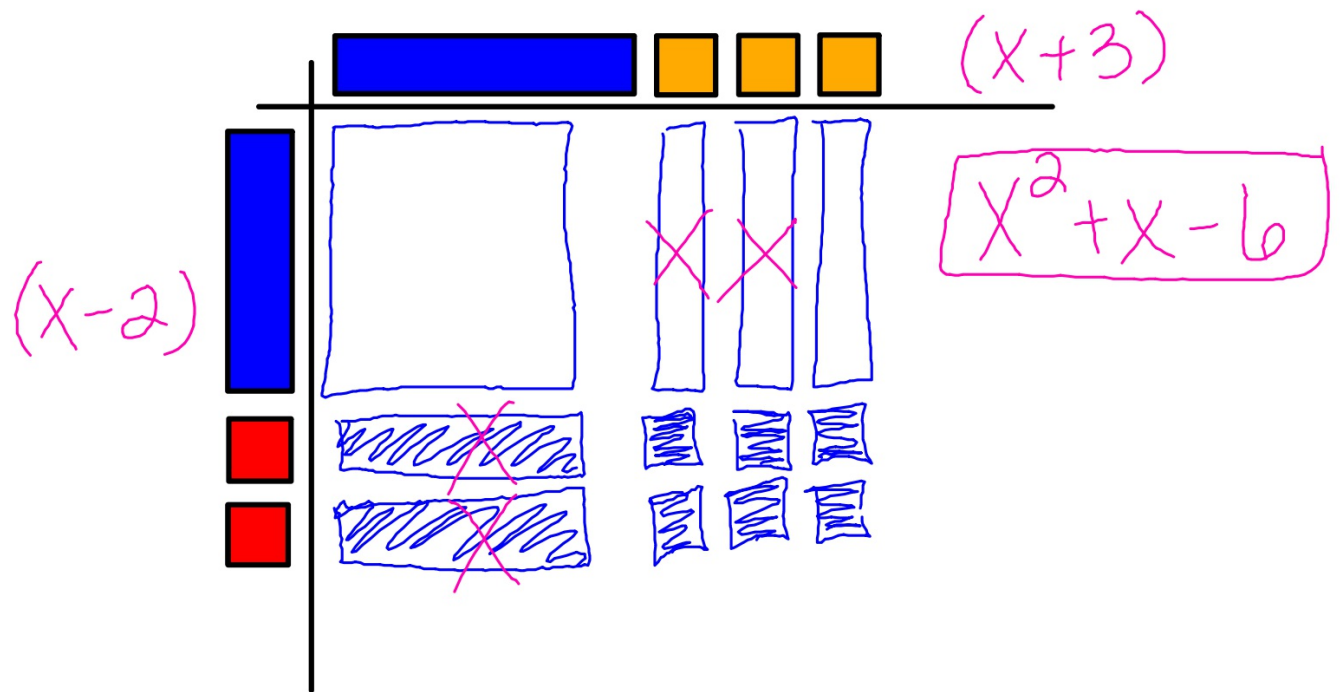




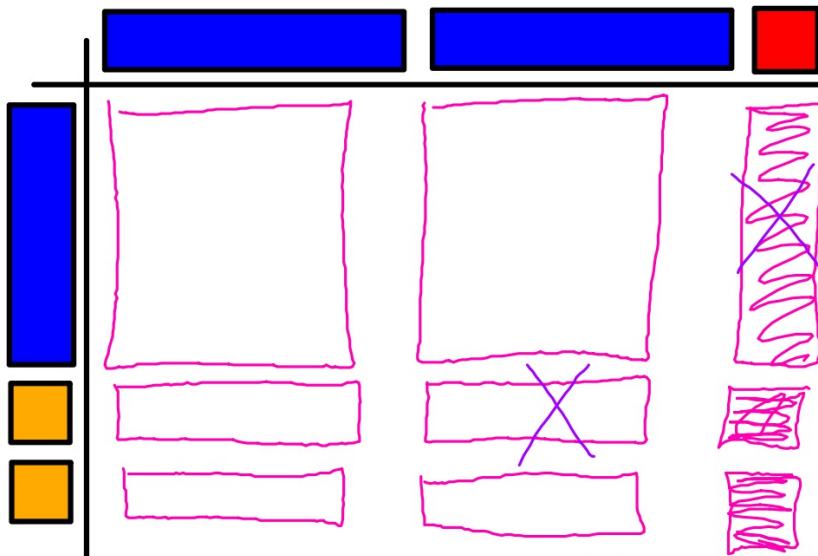
What happens when we multiply  $x$  times  $x$ ?

$$x' \cdot x' = x^2$$



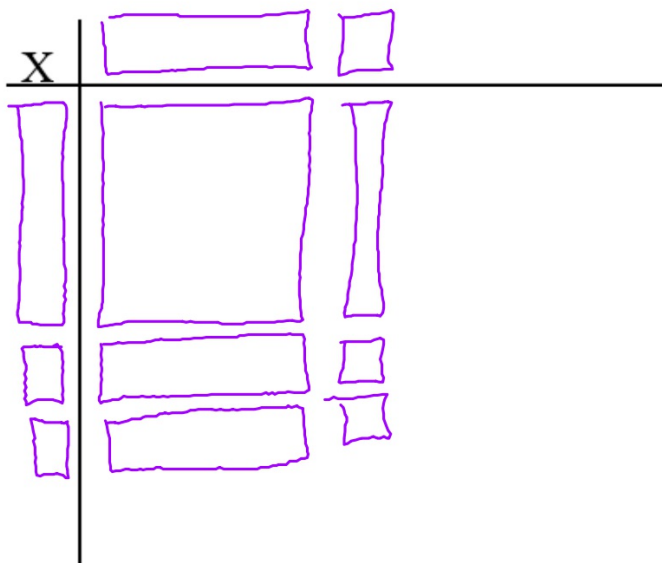






$$(2x-1)(x+2) = 2x^2 + 3x - 2$$

1.  $(x + 1)(x + 2) = \underline{x^2 + 3x + 2}$



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

