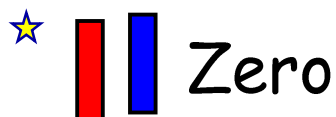


2.7A FACTORING x^2+bx+c WITH ALGEBRA TILES

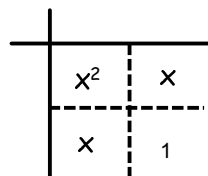
USING RECTANGLES:

Rules of the game:

- The large squares (x^2) cannot touch the small squares (1)
- The tiles in each quadrant must be the same colour
- You may bring in zeros to help you create the rectangle

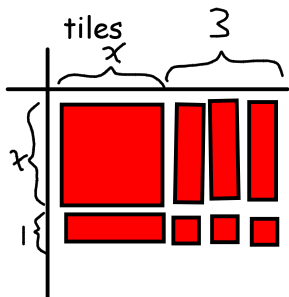


★ Area Model

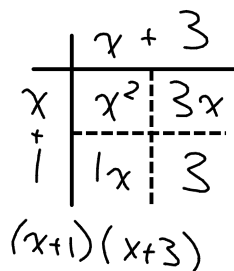


Create rectangles using the following tiles:

$$x^2 + 4x + 3$$



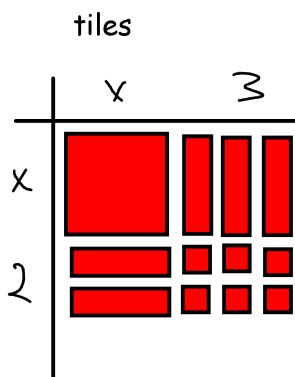
diagram



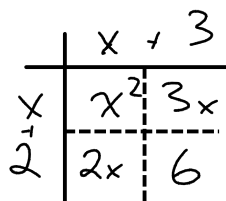
algebra

$$x^2 + 4x + 3 = (x+1)(x+3)$$

$$x^2 + 5x + 6$$



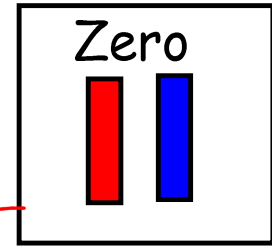
diagram



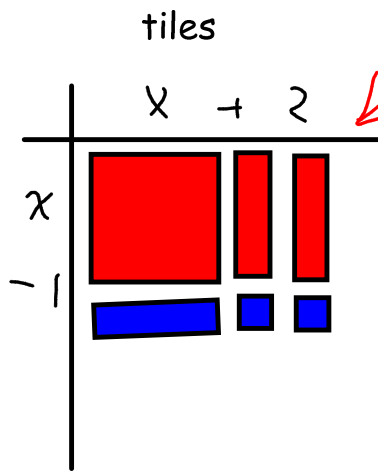
algebra

$$x^2 + 5x + 6 = (x+3)(x+2)$$

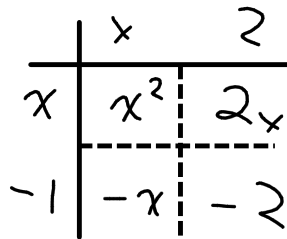
Create rectangles using the following tiles:



$$x^2 + x - 2$$



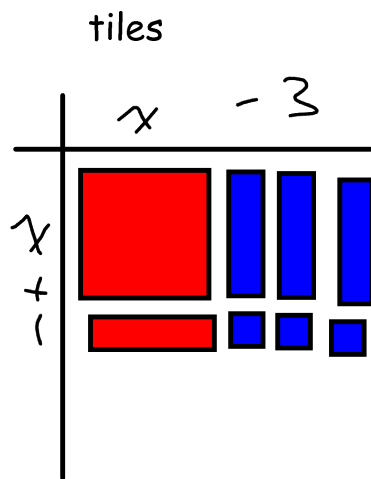
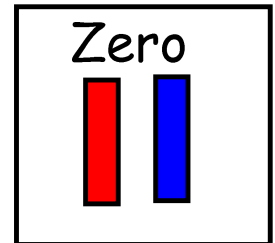
diagram



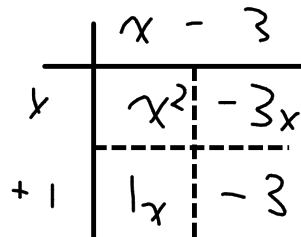
algebra

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

$$x^2 - 2x - 3$$



diagram



algebra

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