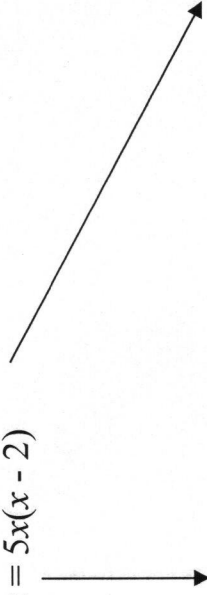


FACTORIZING QUADRATICS ($ax^2 + bx + c$)



COMMON FACTORS

$$5x^2 - 10x = 5x(x - 2)$$



DIFFERENCE OF SQUARES

$$x^2 - 4 = (x - 2)(x + 2)$$



Conjugates

QUADRATIC TRINOMIALS ($a = 1$)

$$x^2 + 10x + 9 = (x + 1)(x + 9)$$

Determine 2 numbers that multiply to get c and add to get b

QUADRATIC TRINOMIALS ($a > 1$)

$$2x^2 + 9x - 5 = (2x - 1)(x + 5)$$

* Guess and check (FOIL)

* Split the middle term

* Borrow/payback

Always check answer with distributive property or FOIL