

# Factoring Quadratic Trinomials



## Overview of problems



Example Set: A

*factor the trinomial*

$$x^2 + 2x - 15$$

$$x + x^2 - 2$$

$$x^2 + 10x + 21$$

$$x^2 - 7x + 12$$

$$x^2 + 12x + 36$$



Example Set: B

*factor the trinomial*

$$3x^2 + 8x + 5$$

$$2x^2 + 9x + 4$$

$$3x^2 - 10x + 8$$

$$6x^2 + 5x - 4$$



## Example Set: C

*factor the trinomial*

$$9x^2 + 9x - 4$$

$$4x^2 + 2x - 2$$

$$5x^2 + 3x - 2$$

$$2x^2 + 3x - 5$$

# Factoring Quadratic Trinomials



## Overview of problems- KEY



Example Set: A

*factor the trinomial*

$$x^2 + 2x - 15$$

$$(x - 3)(x + 5)$$

$$x + x^2 - 2$$

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

$$x^2 + 10x + 21$$

$$(x + 3)(x + 7)$$

$$x^2 - 7x + 12$$

$$(x - 3)(x - 4)$$

$$x^2 + 12x + 36$$

$$(x + 6)(x + 6)$$



## Example Set: B

*factor the trinomial*

$$3x^2 + 8x + 5$$

$$(x + 1)(3x + 5)$$

$$2x^2 + 9x + 4$$

$$(2x + 1)(x + 4)$$

$$3x^2 - 10x + 8$$

$$(x - 2)(3x - 4)$$

$$6x^2 + 5x - 4$$

$$(3x + 4)(2x - 1)$$



## Example Set: C

*factor the trinomial*

$$9x^2 + 9x - 4$$

$$(3x + 4)(3x - 1)$$

$$4x^2 + 2x - 2$$

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

$$5x^2 + 3x - 2$$

$$(5x - 2)(x + 1)$$

$$2x^2 + 3x - 5$$

$$(2x + 5)(x - 1)$$