

# M10 - 5.3 - Factoring $ax^2 + bx + c$ "a ≠ 1" HW

Factor the following

$$2x^2 + 7x + 6$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

Check by foil:

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

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

$$6x^2 + 19x + 3$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

$$5x^2 + 12x + 1$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

$$3x^2 + 13x + 4$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

$$2x^2 + 3x - 9$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

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

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

$$6x^2 + 17x + 10$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

$$5x^2 + 13x + 9$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

# M10 - 5.3 - Factoring $ax^2 + bx + c$ "a ≠ 1" HW

**Factor the following**

$$2x^2 + 5x + 3 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \quad 2x^2 + x - 1 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} =$$
$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \quad \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

$$3x^2 - 8x + 4 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \quad 2x^2 - 9x + 10 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} =$$
$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \quad \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

$$3x^2 - 11x + 6 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \quad 2x^2 - 13x + 15 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} =$$
$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \quad \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

$$5x^2 - 17x - 12 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \quad 4x^2 - 8x + 5 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} =$$
$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \quad \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

# M10 - 5.3 - Factoring $ax^2 + bx + c$ "a ≠ 1" HW

**Factor the following**

$$2x^2 - x - 6$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

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

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

$$4x^2 + 16x + 15$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

$$6x^2 + 16x + 8$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

$$2x^2 + 7x + 6$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

$$3x^2 + 7x + 4$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

$$3x^2 + 4x + 1$$

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

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

$$\underline{\quad} \times \underline{\quad} =$$
  
$$\underline{\quad} + \underline{\quad} =$$

## M10 - 5.3 - Perfect Squares HW

**Factor the following.**

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

$$x^2 + 10x + 25$$

$$x^2 - 6x + 9$$

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

$$x^2 - 2x + 1$$

$$x^2 - 8x + 16$$

$$x^2 + 2x + 1$$

$$x^2 + 8x + 16$$

$$x^2 + 6x + 9$$

$$9x^2 + 12x + 4$$

$$4x^2 - 4x + 1$$

$$9x^2 - 12x + 4$$

$$9x^2 - 6x + 1$$

$$9x^2 + 6x + 1$$

$$16x^2 + 24x + 9$$