Name: _____   Date: _____

Learning Goal 1.2	Factor trinomials of the form $ax^2 + bx + c$.

Expand:

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

$(x - 1)^2 =$ $\qquad\qquad$ $(x - 2)^2 =$ $\qquad\qquad$ $(x - 3)^2 =$

$(x + 1)^2 =$ $\qquad\qquad$ $(x + 2)^2 =$ $\qquad\qquad$ $(x + 3)^2 =$

$(2x - 1)^2 =$ $\qquad\qquad$ $(3x - 1)^2 =$ $\qquad\qquad$ $(4x - 1)^2 =$

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

What patterns do you see in the trinomials and their factors above?

How could you use the patterns to factor these trinomials?
$$4x^2 + 20x + 25 \quad \text{and} \quad 9x^2 - 12x + 4$$

This type of polynomial is called a _____.

Example Factor these trinomials

a. $36x^2 + 12x + 1$ b. $16 - 56x + 49x^2$

How about these?

a. $81m^2 - 49$ b. $162v^4 - 2w^4$

This type of polynomial is called a _____.

Assignment   Handout   Quiz Next Day!