

Name _____

Lesson 3: Factoring Trinomials with a Leading Coefficient**WARM-UP**

1. Factor the following polynomials:

2. $x^2 + 9x + 20$

3. $p^2 - 13p - 30$

**LEARNING
OUTCOMES**

- I can factor polynomials with a leading coefficient > 1

2. Multiply the binomials: $(2x + 3)(1x + 5)$

Exercises

1. Factor the trinomial: $2x^2 + 13x + 15$

3. Factor: $3x^2 - x - 4$

Exercises 1–6

Factor the expanded form of these quadratic expressions. Pay particular attention to the negative/positive signs.

1. $3x^2 - 2x - 8$

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

3. $3x^2 + x - 14$ [Notice that there is a 1 as a coefficient in this one.]

4. $2x^2 - 21x - 36$ [This might be a challenge.]

5. $-2x^2 + 3x + 9$ [This one has a negative on the leading coefficient.]

6. $r^2 + \frac{6}{4}r + \frac{9}{16}$ [We need to try one with fractions, too.]

Name _____

CW/Homework



Lesson 3: Factoring Trinomials with a Leading Coefficient

Factor the following quadratic expressions.

1. $3x^2 - 2x - 5$

2. $-2x^2 + 5x - 2$

3. $5x^2 + 19x - 4$

4. $4x^2 - 12x + 9$ [This one is tricky, but look for a special pattern.]

5. $3x^2 - 13x + 12$