

Today's Plan:

Learning Target (standard): I will factor trinomials by splitting the middle.

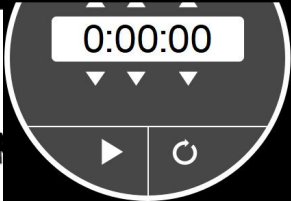
Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work and review polynomials.

Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of review problems.

Assessment: Board work, homework check and homework assignment

Differentiation: Students will work at the board, go over and correct homework at their seats and actively engage in review problems.

NAME _____



#106

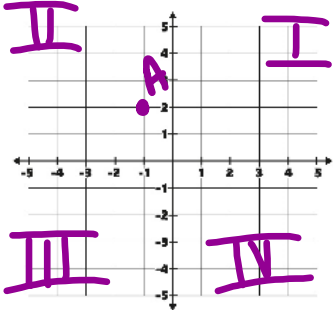
$4(2) - 10$
 $8 - 10$ (-2)

BELL RINGER

1.) Evaluate the expression for the given value of x.
 $4x - 10$; $x = 2$

2.) Solve $-2x < 6$. $x > -3$
 Write the solution in set and interval form.
 $\{x \mid x > -3\}$ $(-3, \infty)$

3.) Plot the point on a coordinate plane.
 $A(-1, 2)$ Which quadrant is it in?
Q II



Simplify.

$$-2(x^3 - 3x^2 + 5x - 6) - 3x^2(-2x + 3x - 4)$$

$$\underline{-2x^3} + \underline{6x^2} - \underline{10x} + \underline{12} + \underline{6x^3} - \underline{9x^3} + \underline{12x^2}$$

$$-5x^3 + 18x^2 - 10x + 12$$

Simplify.

$$\left(\frac{4x^2}{-2x^2} - \frac{6x}{-2x^2} + \frac{8}{-2x^2} \right) \div (-2x^2)$$

$$-2 + \frac{3}{x} - \frac{4}{x^2}$$

Simplify.

$$(3x^2 - 4x + 2)(2x - 5)$$

$$\underline{6x^3} - \underline{15x^2} - \underline{8x^2} + \underline{20x} + \underline{4x} - \underline{10}$$

$$6x^3 - 23x^2 + 24x - 10$$

Factor.

$$y^2 + 11y + 24$$

$$\underline{y^2 + 8y} + \underline{3y + 24}$$

$$y(y+8) + 3(y+8)$$

$$(y+8)(y+3)$$

$$\begin{array}{c} 24 \\ \wedge \\ 8 + 3 = 11 \end{array}$$

Factor.

$$u^2 - 12u + 32$$

$$\begin{array}{c} 32 \\ \wedge \\ -8 + -4 = -12 \end{array}$$

$$\frac{u^2 - 8u - 4u + 32}{u \quad \downarrow \quad -4}$$

$$u(u-8) - 4(u-8)$$

$$(u-8)(u-4)$$

Factor.

$$k^2 - 2k - 48$$

$$\begin{array}{c} 48 \\ \wedge \\ 6 - 8 = -2 \end{array}$$

$$\frac{k^2 + 6k - 8k - 48}{k \quad \downarrow \quad -8}$$

$$k(k+6) - 8(k+6)$$

$$(k+6)(k-8)$$

Factor.

$$m^2 + 3m - 18$$

$$\begin{array}{c} 18 \\ \wedge \\ 6 - 3 = 3 \end{array}$$

$$\frac{m^2 + 6m - 3m - 18}{\begin{array}{c} m \quad \downarrow \quad -3 \end{array}}$$

$$\underline{m(m+6)} - 3\underline{(m+6)}$$

$$(m+6)(m-3)$$

Factor.

$$3t^2 - 14t + 8$$

$$\begin{array}{c} 24 \\ \wedge \\ -12 + 2 = -14 \end{array}$$

$$\frac{3t^2 - 12t - 2t + 8}{\begin{array}{c} 3t \quad \downarrow \quad -2 \end{array}}$$

$$\underline{3t(t-4)} - 2\underline{(t-4)}$$

$$(t-4)(3t-2)$$

Completely Factor.

$$\frac{-4n^4}{-4n^2} + \frac{40n^3}{-4n^2} - \frac{100n^2}{-4n^2}$$

$$-4n^2(n^2 - 10n + 25)$$

$$\begin{array}{c} 25 \\ \wedge \\ -5 + 5 = -10 \end{array}$$

$$\begin{array}{c} n^2 - 5n - 5n + 25 \\ \underline{\quad} \quad \quad \underline{\quad} \\ n \quad \downarrow \quad -5 \end{array}$$

$$\downarrow \quad \underline{n(n-5)} - \underline{5(n-5)}$$

$$(n-5)(n-5)$$

$$-4n^2(n-5)^2$$

Completely Factor.

$$5a^3b^2 + 3a^4b - 2a^2b^3$$

$$\frac{3a^4b}{a^2b} + \frac{5a^3b^2}{a^2b} - \frac{2a^2b^3}{a^2b}$$

$$a^2b(3a^2 + 5ab - 2b^2)$$

$$\begin{array}{c} 3a^2 + 6ab - ab - 2b^2 \\ \underline{\quad} \quad \quad \underline{\quad} \\ 3a \quad \downarrow \quad -b \end{array}$$

$$\begin{array}{c} 6 \\ \wedge \\ 6 - 1 = 5 \end{array}$$

$$\underline{3a(a+2b)} - \underline{b(a+2b)}$$

$$a^2b(a+2b)(3a-b)$$

Completely Factor.

$$a^4 - b^4$$

$$(a^2 + b^2)(a^2 - b^2)$$

$$(a^2 + b^2)(a + b)(a - b)$$

Assignment:

Polynomial & Factoring Review

#2-24 even