Today's Plan:

Learning Target (standard): I will factor polynomials using various methods.

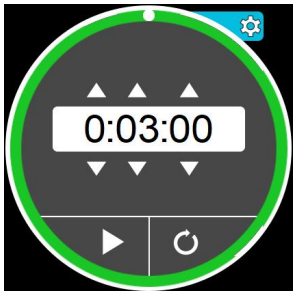
Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work and take a test on operation on polynomials and factoring.

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

Assessment: Board work, homework check and test

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

Bell Ringer:



Factor each.

$$18r^3 - 12r^2 + 21r - 14$$

$$75x^2 - 147y^2$$

$$32x^3 + 8x^2 + 48x + 12$$

Factor.

$$18r^3 - 12r^2 + 21r - 14$$

$6r^2$ $\quad$ 7

$$6r^2(3r-2) + 7(3r-2)$$

$$(3r-2)(6r^2+7)$$

Factor.

$$75x^2 - 147y^2$$

$$3(25x^2 - 49y^2)$$

$$3(5x+7y)(5x-7y)$$

Factor.

$32x^3+8x^2+48x+12$

$8x^2(4x+1)+12(4x+1)$

$(4x+1)(8x^2+12)$

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

Simplify.

$(3xy-4)^2 = (3xy-4)(3xy-4)$

$3xy(3xy-4)-4(3xy-4)$

$9x^2y^2-12xy-12xy+16$

$9x^2y^2-24xy+16$

Simplify.

$$\left(4x^5 - 6x^3 + 2x - 8\right) \div \left(-2x^2\right)$$

$$\frac{4x^5}{-2x^2} - \frac{6x^3}{-2x^2} + \frac{2x}{-2x^2} - \frac{8}{-2x^2}$$

$$\frac{2 \cancel{4} \cdot \cancel{x} \cdot \cancel{x} \cdot \cancel{x} \cdot \cancel{x}}{-2 \cdot \cancel{x} \cdot \cancel{x}} = \frac{2x^2}{-1}$$

$$\frac{\cancel{2}x}{-\cancel{2}x \cdot \cancel{x}} = \frac{1}{-x} = -\frac{1}{x}$$

$$-2x^3 + 3x - \frac{1}{x} + \frac{4}{x^2}$$