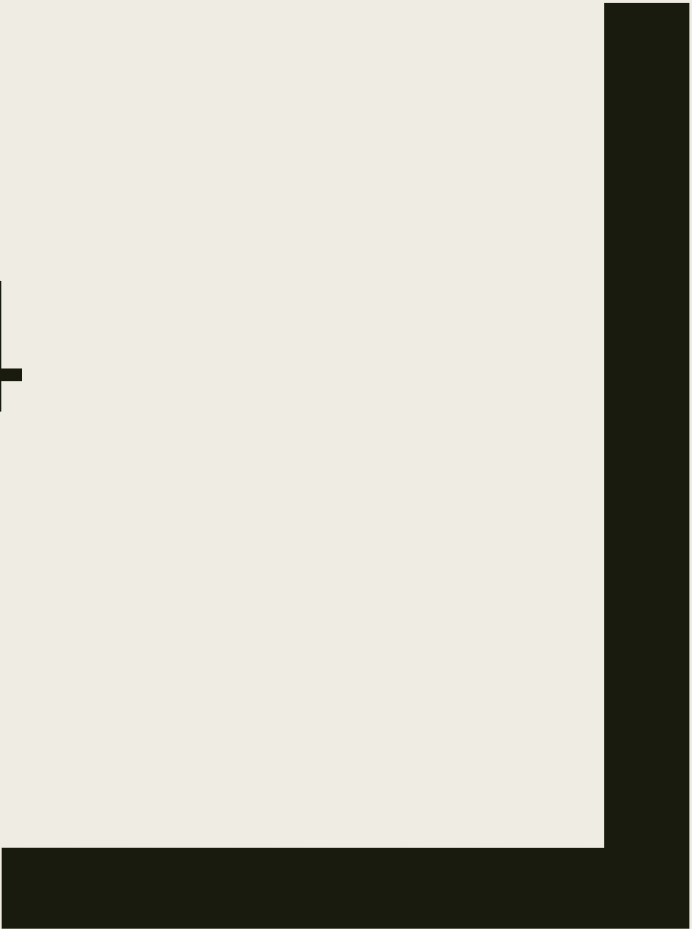




# ALGEBRA 4

Day 42



# Bell Work

- Graph the following. Is it an example of a quadratic? Why or why not?

1.)  $y = -2x + 4$

2.)  $y = x^2 - 6x + 8$

3.)  $f(x) = \frac{1}{3}x^2 - 0.6x + \pi$

# Objective

- Overview of Algebra 4
- Quick Review of Algebra 3

# Second Semester Break Down (3<sup>rd</sup> Quarter)

Week of Jan 9: Review Algebra 3 (specifically quadratics)

Week of Jan 15: Start Polynomial Unit

Week of Jan 22: Polynomials

Week of Jan 29: Polynomials

Week of Feb 5: Finish Polynomials

**Week of Feb 12: Polynomial Test & Grade Checks**

Week of Feb 19: Start Probability Unit

Week of Feb 26: Prob

**Week of Mar 5: Finish Prob and Test**

---End 3rd Quarter---

# Second Semester Break Down (4<sup>th</sup> Quarter)

Week of Mar 12: Spring Break

Week of Mar 19: Start an ACT Unit: Pre; Elem; Interm. Algebra & Geometry

**Week of Mar 26: ACT Unit: ACT & Strategies, Practice Exam**

Week of Apr 2: Start Stats Unit (ACT TEST ON 4/3)

Week of Apr 9: Statistics

**Week of Apr 16: Finish Stats and Test**

Week of Apr 23: Start Exponential/Log Unit

Week of Apr 30: Logs

**Week of May 7: Finish Logs and Test (SENIOR FINALS)**

Week of May 14: Review for Finals

**Week of May 21: Take Finals**

---End 4th Quarter---

# Quadratic Review

- Multiple ways to solve quadratic,  $ax^2 + bx + c$ , equations
  - *Factoring* (best when  $a = 1$ )
  - *Graphing* (set = 0 and find roots)
  - *Quadratic Formula*

# The Quadratic Formula;

*The solutions of the quadratic equation  
 $ax^2 + bx + c = 0$  are:*

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

- Can be used to solve any quadratic equation (instead of factoring or graphing)
- Must be in standard form;  $ax^2 + bx + c = 0$

Solve:

1.)  $5x^2 = 20$

2.)  $x^2 + x = 6$

3.)  $3x^2 - 17x + 10 = 0$

4.)  $x^2 = -9$



For Next Time

Page 245 #11 – 23 (odd), 38

Page 253 #39, 43