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 (3rd 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 (4th 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

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