**H. Geom. Parabolas and Circles Feb. 3 - 25**

*Assignments are due the following day. All assignments are from Green Book.*

*BE SURE TO HAVE YOUR CALCULATOR EVERY DAY!*

*USE GRAPH PAPER FOR GRAPHING PROBLEMS.*

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| **1** | MondayFeb. 3 | *Graph**Parabolas* | p. 484 # 11, 13, 15, 16*Make a table, graph, check w/ calculator.* |
| **2** | TuesdayFeb. 4 | Analyze Parabolas | p. 484# 13, 18, 23, 25, 27 *Analyze as in class, make a sketch, label critical points with coordinates.* |
|  | Wednesday Feb. 5 | **SNOW DAY** |
| **3** | ThursdayFeb. 6 | Calculator Use | *Analyze and sketch:*$y=-x^{2}+4x-5$*,* $y=\frac{1}{2}x^{2}-3x+4$*,* $y=x^{2}-6x+9$*Use calculator to find critical values:*$$y=-2.4x^{2}+8.7x+9.1$$*Handout “Change one thing” - odds* |
| **4** | FridayFeb. 7 | Vertex Form | p. 480# 11, 14, 16p. 484# 35, 37, 38*Handout “Change one thing” - evens* |
| **5** | MondayFeb. 10 | Circles | p. 490# 3-6, 9-12, 19, 20, 29, 31, 33 |
| **6** | TuesdayFeb. 11 | DoubleCompleteThe Square | p. 480# 13, 15, 17p. 490# 13, 15, 23, 25 |
| **7** | Wednesday Feb. 12 | SystemsGraphically | p. 491# 39 p. 512 # 10p. 498# 13, 15, 17, 23 *Solve these with a graph. I will check. 4 nice graphs. Got it?* |
| **8** | ThursdayFeb. 13 | SystemsAlgebraically | p. 484 # 36 p. 491# 42p. 498# 13, 15, 17, 23  *use algebra* |
| **9** | FridayFeb. 14 | Tessellations | Extra Credit Tessellation Assignment-see edmodo |
| **February Break****No School** |
| **10** | MondayFeb. 24 | Review | Review Sheet -Answers online |
| **11** | TuesdayFeb. 25 | TEST |  |

**What you should know by the end of this Unit…**

* How to sketch a parabola from the equation.
* How to write the equation of a parabola given the graph.
* What the critical features of a parabola are, and how to analyze them.
* How to use your calculator to analyze a parabola.
* How to sketch a circle given the equation.
* How to derive the equation of a circle given information about the graph.
* How to complete the square with two variables.
* How to solve a linear/quadratic system of equations graphically.
* How to solve a linear/quadratic system of equations algebraically.
* How to use both the “algebraic” and “graph” version of the equations of lines, parabolas and circles.