

Back Ground Exploration for Synthesis Paper

Do the following Questions on a separate sheet of paper.

Pge 14 -#16 - Evaluating

Pge 22 - #22 – Solving Equations

Pge 263 - #39 – Solve Quadratic by factoring

Pge 45 - #28 – Solving Linear Inequalities

Pge 55 - # 23 – Solving Absolute Value Equations

Pge 127 - #18 – Graphing Absolute Value with Transformations

Pge 249 - #8 – Graph Quadratic in vertex form

Pge 86 - # 8 – Finding Slope

Pge 30 # 10 – Solving Equations for one variable

Pge 93 - #14 – Graphing Equations in Slope Intercept

Pge 164 - #16 – Solve system of equation with algebra – check solution by graphing

Pge 101 - #16 – Making Equation given Point and Slope

Pge 135 - #18 – Graphing Linear Inequalities with two variables

Pge 171 - #18 – Graphing systems of Linear Inequalities

Pge 182 - #12 – DON'T SOLVE – Just Explain how to use matrix to solve system

Pge 240 - # 22 – Graph Quadratic in standard Form

pge 296 - #22 – Solve quadratic by quadratic formula check by factoring

Questions to lead your exploration of the first few chapters and the relationship between linear and quadratic.

What is the degree of a linear equation? What's the graph look like? How many changes in direction does the graph have? How many x-intercepts does it have? How do you solve linear equations?

What is the degree of a quadratic? What does the graph look like? How many changes in direction does the graph have? How many x-intercepts does it have? How do you solve Quadratics?

How are quadratics and linear equations different/similar? Is there a possible connection between the number of solutions of each of them and the power of the leading exponent of the domain?

What is difference between an equation and an inequality? What is the difference in their graphs? What is the difference in their solutions? What are the similarities?

What is a system of equations in algebra? What does a solution to a system look like? What are some methods for solving systems of equations? How does a system of equations differ from a system of inequalities?

How are graphing absolute values with transforms similar to graphing quadratics in vertex form? What are the differences in shape? Why is there a difference in the shape of a quadratic and an absolute value graph?