Math Final Exam Study Guide

Grade: 8

Topic 1 - Solving Equations and Inequalities

1-1 Solving Linear Equations (Pages 5 to 11)

- Explain that each step in solving a linear equation follows from the equality in the previous step
- Create and solve linear equations with one variable using the properties of equality

1-2 Solving Equations with Variables on Both Sides (12 to 17)

- Use the properties of equality to solve linear equations with a variable on both sides
- Identify whether linear equations have one solution, infinitely many solutions, or no solution

1-3 Literal Equations and Formulas (Pages 18 to 23)

- Rearrange formulas and equations to highlight a quantity of interest by isolating the variable using the same reasoning used to solve equations
- Use formulas and equations to solve problems

1-4 Solving Inequalities in One Variable (Pages 24 to 29)

- Create and solve inequalities in one variable.
- Interpret solutions to inequalities within the context.
- Identify inequalities as true or false based on the number of solutions

1-5 Compound Inequalities (Pages 31 to 35)

- Create and Solve a system of inequalities
- Interpret the solution of a compound inequality on a number line

1-6 Absolute Value Equations and Inequalities (Pages 37 to 42)

- Solve Absolute Value equations and inequalities

Topic 2 - Linear Equations

2-1 Slop-Intercept Form (Pages 51 to 55)

- Write Linear Equations in two variables using slope intercept form
- Interpret the slope the and the y- intercept of a line

2-2 Point-Slope Form (Pages 57 to 61)

-Write and graph linear equations in point-slope form

2-3 Standard Form (Pages 63 to 67)

- Write and graph linear equations in standard form
- Use Linear equations in standard form to interpret the x- and y- intercepts

2-4 Parallel and Perpendicular Lines (Pages 70 to 75)

-Write equations to represent lines that are parallel or perpendicular to a given line

- Graph Lines to show the relationship between the slopes of parallel and perpendicular lines

❖ **Note**

A Revision worksheet will be provided before the exam that will include all types of questions to expect on the Final exam.

❖ **Please Review**

- All the problems done in-class and assigned as homework
- Worksheets
- Quizzes
- Additional Practice on Savvas

Good Luck!