

Math 8, Unit 4: Equations and Inequalities

Our Learning Goals:

We will...

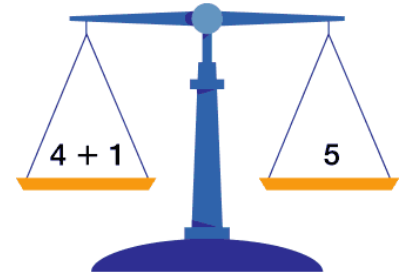
- ✓ Solve one-variable equations and inequalities with variables on both sides of the equal sign
- ✓ Use the properties of equality to solve one-variable equations and inequalities
- ✓ Use concepts of combining like terms and inverse operations to solve one-variable equations and inequalities
- ✓ Write algebraic equations and inequalities from real-world situations
- ✓ Use manipulatives such as algebra tiles to model and solve one-variable equations with variables on both sides
- ✓ Graph two linear equations on a coordinate grid and find the point of intersection (x, y) that satisfies the system

Why do we study this?

- ❖ Understanding the relationship between an equation and an inequality, students will be able to determine if a problem has one solution, no solution, or more than one solution.
- ❖ Understanding the solution to a system of equations, students can make the connection with real-world situations such as roads that run parallel to each other that would have no solution in a given system of equations, roads that run perpendicular to each other (intersecting roads), one solution in a system. Single lane roads represent the infinite solutions of a system of equations because they are the same road running in different directions.

How we will show what we have learned...

Formative Assessments	Summative Assessments
Ongoing formative assessments during lesson and homework activities will help in monitoring learning and providing feedback for students.	Summative assessments to measure learning at the end of concepts may include the following: <ul style="list-style-type: none">• Tests: Writing and Solving Equations and Inequalities, Systems of Linear Equations• Unit 4 Performance Assessment (District Wide)



Sample Problem:

Janna spends her afternoons as a lifeguard at the community pool. Each day, she is paid \$10.00 plus \$2.00 per hour. Write an equation for Janna's daily earnings. If she works 6 hours each day for 10 days, what are her total earnings?

Additional Support:

- Check the teacher's Canvas page for helpful resources.
- Search the topic on the web. We recommend using Khan Academy. www.emsisd.com/khan
- Attend tutorials.



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Questions? Please contact your 8th grade math teacher.

--Your EM-S ISD 8th Grade Math Team