

TEKS Cluster: Equations/Inequalities

TEKS Subcluster: Representations and Solutions of Equations/Inequalities

Student Expectations: 7.10(B), 7.11(A), 7.11(B) – Connected SEs: 7.10(A)

Activities Summary: Students build their knowledge of solving one-step equations and inequalities from Grade 6. They learn to solve two-step equations and inequalities and graph them. If students need support in solving one-step equations, see mathmark activities in Grade 6. Activities may be organized and delivered in two topics: **Equations and Inequalities.**

Activity Title Student Expectations	Activity Topic	Type			Delivery		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
Equations							
Keep It Balanced 7.10(B), 7.11(A), 7.11(B)	Solve Equations Using a Balance Scale Students solve equations and record their solutions. Scaffolding includes problems with positive numbers only for use with chips and cubes and for students who are struggling with the process of solving equations.	✓			✓		
Balance the Algebra Tiles 7.11(A), 7.11(B)	Solve Equations Using Algebra Tiles Students solve equations with integers using algebra tiles and record actions.	✓			✓		
Solve the Equations 7.10(B), 7.11(A)	Solve and Graph Two-Step Equations Students analyze two-step equations to determine the best or easiest way to solve, solve and graph the equations. Some problems include fractions.	✓	✓		✓		
Find the Number 1 7.11(A), 7.11(B)	Solve Two-Step Equations In this stations activity, students draw a number and place it in a partially-filled-out solution to an equation. They determine if the equation is solved correctly.		✓	✓		✓	
From Word Problems to Equations to Solutions 7.11(A), 7.10(A)	Write and Solve Equations to Match Word Problems Students choose an equation to represent a problem, solve the problem, and check to see if the solution makes sense.	✓	✓		✓		
Inequalities							
Solve the Inequalities 1 7.10(B), 7.11(A), 7.11(B)	Solve and Graph Two-Step Inequalities Students solve inequalities and represent them on a number line. Inequalities include positive coefficients only.	✓	✓		✓		
Solve the Inequalities 2 7.10(B), 7.11(A), 7.11(B)	Solve and Graph Two-Step Inequalities Students solve and represent inequalities on a number line. Inequalities include positive and negative coefficients.	✓	✓		✓		
Find the Number 2 7.11(A), 7.11(B)	Solve Two-Step Inequalities In this stations activity, students draw a number and place it in a partially filled out solution to an equation. They determine if the equation is solved correctly.	✓	✓		✓		
Find the Mistake – Solving Inequalities 7.11(A), 7.11(B)	Solve and Graph Two-Step Inequalities In this find-the-mistake activity, students find the mistakes in solutions and graphs of inequalities.						