

Unit 12

Solving Equations

Grade 8

Lesson Outline

<u>BIG PICTURE</u>			
Students will: <ul style="list-style-type: none"> translate statements of mathematical relationship into equations; solve and verify linear equations with one variable term using a variety of strategies. 			
Day	Lesson Title	Math Learning Goals	Expectations
1	What Makes It True? <i>(lesson not included)</i>	<ul style="list-style-type: none"> Use inspection and estimation to ‘guesstimate’ integer solutions to equations having only two terms, one of which contains a variable. Justify estimations of solutions to simple equations. Check estimation solutions by a formal verification process. 	8m18, 8m23, 8m64 CGE 3c, 4f
2	A Balancing Act <i>(lesson not included)</i>	<ul style="list-style-type: none"> Use ‘inspection’ and ‘guess and check’ to solve equations with integer solutions having one variable term and two constant terms. Use a ‘balance model’ to solve equations with integer solutions having one variable term and two constant terms. Virtual website http://matti.usu.edu/nlvm/nav/vlibrary.html Choose Index → Algebra Balance Scales → Algebra (9–12) 	8m18, 8m23, 8m64 CGE 5b, 7b
4	Breaking the Code <i>(lesson not included)</i>	<ul style="list-style-type: none"> Find an equation expression for the general term of a given number pattern. Determine, given the general term of a number pattern, which term has a particular value by solving an equation. 	8m18, 8m56, 8m63, 8m64 CGE 3c, 4b
5, 6	Model Solutions <i>(lessons not included)</i>	<ul style="list-style-type: none"> Solve problems having integer solutions by first algebraically modelling the facts with an equation and then solving the equation. 	8m22, 8m59, 8m61, 8m64 CGE 2b, 4f
7	Summative Assessment		