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| Domain: Expressions and Equations |
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| **Standard: 6.EE.1 Write and evaluate numerical expressions involving whole-number exponents.** |
| General Resources[Whole Number Exponent RtI Strategy Mat](http://jcps.jefferson.kyschools.us/section/content/default.asp?WCI=pgDisplay&WCU=CRSCNT&ENTRY_ID=3621A6B05EAE4AF3BB6B6CD9E1E6D5D6)[NYC Dept Ed Unit: Grocery Shopping and the Quilt of a Math Teacher](http://schools.nyc.gov/173604F1-3540-4FEC-AA2A-121298275944/FinalDownload/DownloadId-45E1F94F9FF5F8AE96EA1BC8A05B7DFD/173604F1-3540-4FEC-AA2A-121298275944/NR/rdonlyres/F7DD52E7-FD7E-44DC-B099-90301CAC9025/140802/NYCDOE_G6_Math_GroceryShopping_FINAL1.pdf)[ShareMyLesson](http://www.sharemylesson.com/TaxonomySearchResults.aspx?area=resources&keywords=6.EE.1)[Literature Links to 6th Grade Math](http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/elementarymathematics/K6%20Support%20Documents/Literature/6th%20Grade%20Literature%20List.pdf#page=7) (Granite School District)[Progressions For Common Core Standards](http://commoncoretools.files.wordpress.com/2011/04/ccss_progression_ee_2011_04_25.pdf#page=2) |
| **“I can” Statements** | **Engaging Activities** | **SMART Resources** | **Videos** | **Web Based Activities** | **Practice/Assessment** |
| I can evaluate exponential expressions.I can write numerical expressions involving whole-number exponents in expanded form.I can write numeric expressions using whole number exponents.I can evaluate numeric expressions using the order of operations. |  | [Simple Algebra Tiles](http://exchange.smarttech.com/details.html?id=6577b867-b012-4551-b3c6-0be8df718c26) | [Powers of 10 Introduction (FantiasticTrip)--video](http://www.authorstream.com/Presentation/puneetsharma20-235498-Power-10-Fantastic-Trip-Puneet-Education-ppt-powerpoint/)[Powers of 10 Introduction (FantiasticTrip)-- PowerPoint](http://www.milc.fcps.net/forum/forums/thread-view.asp?tid=1062) | [SAS Curriculum Pathways](http://www.sascurriculumpathways.com/portal/#/home): **Evaluating Expressions**, QL #1292 audio/video tutorial and lesson guide (CIITS resource) | [Laws of Arithmetic](http://map.mathshell.org/materials/lessons.php?taskid=484&subpage=concept) (Formative Assessment Lesson 6.EE.1-6.EE.4 and 6.G.1-6.G.4) |
|  |  | [PEMDAS RAP](http://www.teachertube.com/viewVideo.php?video_id=79967) | [SAS Curriculum Pathways](http://www.sascurriculumpathways.com/portal/#/home): **Simplify Expressions Using Order of Operations**, QL #1319 Interactive Tool and lesson guide(CIITS resource) |  |
|  |  |  | [LearnZillion 6.EE.1](http://learnzillion.com/lessons?utf8=%E2%9C%93&filters%5Bsubject%5D=math&query=&filters%5Bgrade%5D%5B%5D=6&filters%5Bdomain%5D=&filters%5Bstandard%5D=6.EE.1%3A+Write+and+evaluate+numerical+expressi...) |  |
|  |  |  | [Order Ops](http://mrnussbaum.com/orderops) (Mr. Nussbaum) link takes you to a video that explains how to play the game |  |

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| Domain: Expressions and Equations |
| **Standard: 6.EE.2 Write, read, and evaluate expressions in which letters stand for numbers.** **a:Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation “Subtract y from 5” as 5 – y.****b:Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression 2 (8 + 7) as a product of two factors; view (8 + 7) as both a single entity and a sum of two terms.****c:Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole- number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas V = s3 and A = 6 s2 to find the volume and surface area of a cube with sides of length s = 1/2.** |
| General Resources[Evaluate and Interpret Expressions RtI Strategy Mat](http://jcps.jefferson.kyschools.us/section/content/default.asp?WCI=pgDisplay&WCU=CRSCNT&ENTRY_ID=A4A1AA0A0DD5467FB394ED133285329B)[NYC Dept Ed Unit: Grocery Shopping and the Quilt of a Math Teacher](http://schools.nyc.gov/173604F1-3540-4FEC-AA2A-121298275944/FinalDownload/DownloadId-45E1F94F9FF5F8AE96EA1BC8A05B7DFD/173604F1-3540-4FEC-AA2A-121298275944/NR/rdonlyres/F7DD52E7-FD7E-44DC-B099-90301CAC9025/140802/NYCDOE_G6_Math_GroceryShopping_FINAL1.pdf)[NYC Dept Ed Unit: Elk Street](http://schools.nyc.gov/NR/rdonlyres/9BC415CE-0FC0-4C97-9795-78A42276615B/140504/NYCDOE_G6_Math_ElkStreet_FINAL.pdf)[ShareMyLesson](http://www.sharemylesson.com/TaxonomySearchResults.aspx?area=resources&keywords=6.EE.2)[Literature Links to 6th Grade Math](http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/elementarymathematics/K6%20Support%20Documents/Literature/6th%20Grade%20Literature%20List.pdf#page=7) (Granite School District)[Progressions For Common Core Standards](http://commoncoretools.files.wordpress.com/2011/04/ccss_progression_ee_2011_04_25.pdf#page=2) |
| **“I can” Statements** | **Engaging Activities** | **SMART Resources** | **Videos** | **Web Based Activities** | **Practice/Assessment** |
| I can identify parts of an expression using mathematical terms.I can view one or more parts of an expression as a single entity.I can translate a problem from words to the language of Algebra.I can substitute numeric values for variables and evaluate the expression using the order of operations. | [Busy Bee](http://www.illustrativemathematics.org/illustrations/985) uses modeling to introduce students to simple equations. This item lends itself to extensions which are suggested. This item can be used as a pre-item for "Morning Walk". | [Simple Algebra Tiles](http://exchange.smarttech.com/details.html?id=6577b867-b012-4551-b3c6-0be8df718c26) |  | [LearnZillion 6.EE.2](http://learnzillion.com/lessons?utf8=%E2%9C%93&filters%5Bsubject%5D=math&query=&filters%5Bgrade%5D%5B%5D=6&filters%5Bdomain%5D=&filters%5Bstandard%5D=6.EE.2%3A+Write%2C+read%2C+and+evaluate+expressions...)[LearnZillion 6.EE.2a](http://learnzillion.com/lessons?utf8=%E2%9C%93&filters%5Bsubject%5D=math&query=&filters%5Bgrade%5D%5B%5D=6&filters%5Bdomain%5D=&filters%5Bstandard%5D=6.EE.2a%3A+Write+expressions+that+record+operati...)[LearnZillion 6.EE.2b](http://learnzillion.com/lessons?utf8=%E2%9C%93&filters%5Bsubject%5D=math&query=&filters%5Bgrade%5D%5B%5D=6&filters%5Bdomain%5D=&filters%5Bstandard%5D=6.EE.2b%3A+Identify+parts+of+an+expression+using...)[LearnZillion 6.EE.2c](http://learnzillion.com/lessons?utf8=%E2%9C%93&filters%5Bsubject%5D=math&query=&filters%5Bgrade%5D%5B%5D=6&filters%5Bdomain%5D=&filters%5Bstandard%5D=6.EE.2c%3A+Evaluate+expressions+at+specific+valu...) | [Laws of Arithmetic](http://map.mathshell.org/materials/lessons.php?taskid=484&subpage=concept) (Formative Assessment Lesson 6.EE.1-6.EE.4 and 6.G.1-6.G.4) |
| [Algebraic Expressions Basketball](http://www.milc.fcps.net/forum/forums/thread-view.asp?tid=1062) |  |  | [SAS Curriculum Pathways](http://www.sascurriculumpathways.com/portal/#/home): **Evaluating Expressions**, QL #1292 audio/video tutorial and lesson guide (CIITS resource) |  |
|  |  |  | [SAS Curriculum Pathways](http://www.sascurriculumpathways.com/portal/#/home): **Simplify Expressions Using Order of Operations**, QL #1319 Interactive Tool and lesson guide(CIITS resource) |  |
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| Domain: Expressions and Equations |
| **Standard: 6.EE.3 Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression 3 (2 + x) to produce the equivalent expression 6 + 3x; apply the distributive property to the expression 24x + 18y to produce the equivalent expression 6 (4x + 3y); apply properties of operations to y + y + y to produce the equivalent expression 3y.** |
| General Resources[Equivalent Expressions RtI Strategy Mat](http://jcps.jefferson.kyschools.us/section/content/default.asp?WCI=pgDisplay&WCU=CRSCNT&ENTRY_ID=E0D7F55A18134D8284B728D65ADFB00A)[NYC Dept Ed Unit: Grocery Shopping and the Quilt of a Math Teacher](http://schools.nyc.gov/173604F1-3540-4FEC-AA2A-121298275944/FinalDownload/DownloadId-45E1F94F9FF5F8AE96EA1BC8A05B7DFD/173604F1-3540-4FEC-AA2A-121298275944/NR/rdonlyres/F7DD52E7-FD7E-44DC-B099-90301CAC9025/140802/NYCDOE_G6_Math_GroceryShopping_FINAL1.pdf)[NYC Dept Ed Unit: Elk Street](http://schools.nyc.gov/NR/rdonlyres/9BC415CE-0FC0-4C97-9795-78A42276615B/140504/NYCDOE_G6_Math_ElkStreet_FINAL.pdf)[ShareMyLesson](http://www.sharemylesson.com/TaxonomySearchResults.aspx?area=resources&keywords=6.EE.3)[Literature Links to 6th Grade Math](http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/elementarymathematics/K6%20Support%20Documents/Literature/6th%20Grade%20Literature%20List.pdf#page=7) (Granite School District)[Progressions For Common Core Standards](http://commoncoretools.files.wordpress.com/2011/04/ccss_progression_ee_2011_04_25.pdf#page=2) |
| **“I can” Statements** | **Engaging Activities** | **SMART Resources** | **Videos** | **Web Based Activities** | **Practice/Assessment** |
| I can use the commutative property to generate equivalent expressions.I can use the associative property to generate equivalent expressions.I can use the distributive property to generate equivalent expressions.I can generate equivalent expressions by combining like terms. | [Equivalent Expressions](http://www.illustrativemathematics.org/illustrations/542) In this problem we have to transform expressions using the distributive, commutative and associative properties to decide which expressions are equivalent. Common mistakes are addressed, such as not distributing the 2 correctly.  | [Simple Algebra Tiles](http://exchange.smarttech.com/details.html?id=6577b867-b012-4551-b3c6-0be8df718c26) |  | [SAS Curriculum Pathways](http://www.sascurriculumpathways.com/portal/#/home): **Evaluating Expressions**, QL #1292 audio/video tutorial and lesson guide (CIITS resource) | [Laws of Arithmetic](http://map.mathshell.org/materials/lessons.php?taskid=484&subpage=concept) (Formative Assessment Lesson 6.EE.1-6.EE.4 and 6.G.1-6.G.4) |
| [Factoring Expressions Matching Activity](http://www.milc.fcps.net/forum/forums/thread-view.asp?tid=1062&posts=3#M3391) |  |  | [Interactive Algebra Tiles](http://my.hrw.com/math06_07/nsmedia/tools/Algebra_Tiles/Algebra_Tiles.html) |  |
| [Algebraic Expressions Basketball](http://www.milc.fcps.net/forum/forums/thread-view.asp?tid=1062) |  |  | [LearnZillion 6.EE.3](http://learnzillion.com/lessons?utf8=%E2%9C%93&filters%5Bsubject%5D=math&query=&filters%5Bgrade%5D%5B%5D=6&filters%5Bdomain%5D=&filters%5Bstandard%5D=6.EE.3%3A+Apply+the+properties+of+operations+to...) |  |
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| Domain: Expressions and Equations |
| **Standard: 6.EE.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions y + y + y and 3y are equivalent because they name the same number regardless of which number y stands for.** |
| General Resources[Equivalent Expressions Strategy Mat](http://jcps.jefferson.kyschools.us/section/content/default.asp?WCI=pgDisplay&WCU=CRSCNT&ENTRY_ID=E0D7F55A18134D8284B728D65ADFB00A)[NYC Dept Ed Unit: Grocery Shopping and the Quilt of a Math Teacher](http://schools.nyc.gov/173604F1-3540-4FEC-AA2A-121298275944/FinalDownload/DownloadId-45E1F94F9FF5F8AE96EA1BC8A05B7DFD/173604F1-3540-4FEC-AA2A-121298275944/NR/rdonlyres/F7DD52E7-FD7E-44DC-B099-90301CAC9025/140802/NYCDOE_G6_Math_GroceryShopping_FINAL1.pdf)[NYC Dept Ed Unit: Elk Street](http://schools.nyc.gov/NR/rdonlyres/9BC415CE-0FC0-4C97-9795-78A42276615B/140504/NYCDOE_G6_Math_ElkStreet_FINAL.pdf)[ShareMyLesson](http://www.sharemylesson.com/TaxonomySearchResults.aspx?area=resources&keywords=6.EE.4)[Literature Links to 6th Grade Math](http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/elementarymathematics/K6%20Support%20Documents/Literature/6th%20Grade%20Literature%20List.pdf#page=7) (Granite School District)[Progressions For Common Core Standards](http://commoncoretools.files.wordpress.com/2011/04/ccss_progression_ee_2011_04_25.pdf#page=2) |
| **“I can” Statements** | **Engaging Activities** | **SMART Resources** | **Videos** | **Web Based Activities** | **Practice/Assessment** |
| I can identify when two expressions are equivalent.I can use substitution to verify when two expressions are equivalent. | [Distance to School](http://www.illustrativemathematics.org/illustrations/540)  This task asks students to find equivalent expressions by visualizing a familiar activity involving distance. The given solution shows some possible equivalent expressions, but there are many variations possible | [Simple Algebra Tiles](http://exchange.smarttech.com/details.html?id=6577b867-b012-4551-b3c6-0be8df718c26) |  | [LearnZillion 6.EE.4](http://learnzillion.com/lessons?utf8=%E2%9C%93&filters%5Bsubject%5D=math&query=&filters%5Bgrade%5D%5B%5D=6&filters%5Bdomain%5D=&filters%5Bstandard%5D=6.EE.4%3A+Identify+when+two+expressions+are+equ...) | [Laws of Arithmetic](http://map.mathshell.org/materials/lessons.php?taskid=484&subpage=concept) (Formative Assessment Lesson 6.EE.1-6.EE.4 and 6.G.1-6.G.4) |
| [Triangular Tables](http://www.illustrativemathematics.org/illustrations/494) This task provides a good opportunity for group work and class discussions where students generate and compare equivalent expressions. |  |  |  |  |
| [Equivalent Expressions](http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/elementarymathematics/K6%20Support%20Documents/6th%20Grade%20Support/Equivalent%20Expressions.pdf) |  |  |  |  |
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| Domain: Expressions and Equations |
| **Standard: 6.EE.5 Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.** |
| General Resources[Equation Buster](http://mathsnet.net/equation.html): understand equation manipulation(+ - x / each side) [NYC Dept Ed Unit: Dance & Text](http://schools.nyc.gov/NR/rdonlyres/134A0EA3-8306-474A-BB7D-A5CF809CF22F/140800/NYCDOE_G6_Math_DanceandText_FINAL1.pdf)[Solving Equations and Inequalities Strategy Mat](http://jcps.jefferson.kyschools.us/section/content/default.asp?WCI=pgDisplay&WCU=CRSCNT&ENTRY_ID=B34123F52CA540A8B1B9322EDA8B06EF)[ShareMyLesson](http://www.sharemylesson.com/TaxonomySearchResults.aspx?area=resources&keywords=6.EE.5)[Literature Links to 6th Grade Math](http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/elementarymathematics/K6%20Support%20Documents/Literature/6th%20Grade%20Literature%20List.pdf#page=7) (Granite School District)[Progressions For Common Core Standards](http://commoncoretools.files.wordpress.com/2011/04/ccss_progression_ee_2011_04_25.pdf#page=2) |
| **“I can” Statements** | **Engaging Activities** | **SMART Resources** | **Videos** | **Web Based Activities** | **Practice/Assessment** |
| I can use substitution to identify the solution for an equation from a specified set.I can use substitution to identify the solutions for an inequality from a specified set.I can prove that a solution is a value that makes an equation or inequality true. | [Log Ride](http://www.illustrativemathematics.org/illustrations/673) In this instructional task students are given two inequalities, one as a formula and one in words, and a set of possible solutions. They have to decide which of the given numbers actually solve the inequalities. | [Simple Algebra Tiles](http://exchange.smarttech.com/details.html?id=6577b867-b012-4551-b3c6-0be8df718c26) |  | [SAS Curriculum Pathways](http://www.sascurriculumpathways.com/portal/#/home): **How to Solve Equations**, QL #1322 Interactive Tool and lesson guide(CIITS resource) |  |
| [Inequality Match-Up](http://www.milc.fcps.net/forum/forums/thread-view.asp?tid=1062) |  |  | [SAS Curriculum Pathways](http://www.sascurriculumpathways.com/portal/#/home): **Solving Simple Equations**, QL #1323 Interactive Tool and lesson guide(CIITS resource) |  |
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| Domain: Expressions and Equations |
| **Standard: 6.EE.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.** |
| General Resources[Thinking Blocks: Model Your Math Problems](http://www.thinkingblocks.com/index.html) Bar modeling[NYC Dept Ed Unit: Dance & Text](http://schools.nyc.gov/NR/rdonlyres/134A0EA3-8306-474A-BB7D-A5CF809CF22F/140800/NYCDOE_G6_Math_DanceandText_FINAL1.pdf)[NYC Dept Ed Unit: Elk Street](http://schools.nyc.gov/NR/rdonlyres/9BC415CE-0FC0-4C97-9795-78A42276615B/140504/NYCDOE_G6_Math_ElkStreet_FINAL.pdf)[ShareMyLesson](http://www.sharemylesson.com/TaxonomySearchResults.aspx?area=resources&keywords=6.EE.6)[Literature Links to 6th Grade Math](http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/elementarymathematics/K6%20Support%20Documents/Literature/6th%20Grade%20Literature%20List.pdf#page=7) (Granite School District)[Progressions For Common Core Standards](http://commoncoretools.files.wordpress.com/2011/04/ccss_progression_ee_2011_04_25.pdf#page=2) |
| **“I can” Statements** | **Engaging Activities** | **SMART Resources** | **Videos** | **Web Based Activities** | **Practice/Assessment** |
| I can use a variable to represent an unknown number.I can use variables to represent numbers and write expressions when solving real-world mathematical problems. | [Firefighter Allocation](http://www.illustrativemathematics.org/illustrations/425) In this task students are asked to write an equation to solve a real-world problem. | [Simple Algebra Tiles](http://exchange.smarttech.com/details.html?id=6577b867-b012-4551-b3c6-0be8df718c26) |  |  |  |
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| Domain: Expressions and Equations |
| **Standard: 6.EE.7 Solve real-world and mathematical problems by writing and solving equations of the form x + p = q and px = q for cases in which p, q and x are all nonnegative rational numbers.**[Equation Buster](http://mathsnet.net/equation.html): understand equation manipulation(+ - x / each side) [NYC Dept Ed Unit: Dance & Text](http://schools.nyc.gov/NR/rdonlyres/134A0EA3-8306-474A-BB7D-A5CF809CF22F/140800/NYCDOE_G6_Math_DanceandText_FINAL1.pdf)[ShareMyLesson](http://www.sharemylesson.com/TaxonomySearchResults.aspx?area=resources&keywords=6.EE.7)[Literature Links to 6th Grade Math](http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/elementarymathematics/K6%20Support%20Documents/Literature/6th%20Grade%20Literature%20List.pdf#page=7) (Granite School District)[Progressions For Common Core Standards](http://commoncoretools.files.wordpress.com/2011/04/ccss_progression_ee_2011_04_25.pdf#page=2) |
| General Resources |
| **“I can” Statements** | **Engaging Activities** | **SMART Resources** | **Videos** | **Web Based Activities** | **Practice/Assessment** |
| I can write and solve one step equations.I can define and use inverse operations. | [Morning Walk](http://www.illustrativemathematics.org/illustrations/1107) a straight forward question that can be solved using an equation in one variable. The numbers are complicated enough so that it is natural to set up an equation rather than solve the problem in one's head. Teacher could use 6.EE Busy Day to introduce the idea of using variables to represent unknown quantities and follow up with 6.EE Morning Walk where the algebraic approach is both grade-appropriate and clearly more efficient to help students see the value of a symbolic approach. | [Simple Algebra Tiles](http://exchange.smarttech.com/details.html?id=6577b867-b012-4551-b3c6-0be8df718c26) |  | [LearnZillion 6.EE.7](http://learnzillion.com/lessons?utf8=%E2%9C%93&filters%5Bsubject%5D=math&query=&filters%5Bgrade%5D%5B%5D=6&filters%5Bdomain%5D=&filters%5Bstandard%5D=6.EE.7%3A+Solve+real-world+and+mathematical+pro...) |  |
| [Firefighter Allocation](http://www.illustrativemathematics.org/illustrations/425) In this task students are asked to write an equation to solve a real-world problem. |  |  |  |  |
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| Domain: Expressions and Equations |
| **Standard: 6.EE.8 Write an inequality of the form x > c or x < c to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form x > c or x < c have infinitely many solutions; represent solutions of such inequalities on number line diagrams.** |
| General Resources[NYC Dept Ed Unit: Dance & Text](http://schools.nyc.gov/NR/rdonlyres/134A0EA3-8306-474A-BB7D-A5CF809CF22F/140800/NYCDOE_G6_Math_DanceandText_FINAL1.pdf)[ShareMyLesson](http://www.sharemylesson.com/TaxonomySearchResults.aspx?area=resources&keywords=6.EE.8)[Literature Links to 6th Grade Math](http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/elementarymathematics/K6%20Support%20Documents/Literature/6th%20Grade%20Literature%20List.pdf#page=7) (Granite School District)[Progressions For Common Core Standards](http://commoncoretools.files.wordpress.com/2011/04/ccss_progression_ee_2011_04_25.pdf#page=2) |
| **“I can” Statements** | **Engaging Activities** | **SMART Resources** | **Videos** | **Web Based Activities** | **Practice/Assessment** |
| I can write an inequality to represent a real world or mathematical problem.I can recognize that an inequality has infinitely many solutions.I can represent the solutions of inequalities on number line diagrams. | [Fishing Adventures](http://www.illustrativemathematics.org/illustrations/642) Students write and solve inequalities, and represent the solutions graphically. | [Simple Algebra Tiles](http://exchange.smarttech.com/details.html?id=6577b867-b012-4551-b3c6-0be8df718c26) |  | [LearnZillion 6.EE.8](http://learnzillion.com/lessons?utf8=%E2%9C%93&filters%5Bsubject%5D=math&query=&filters%5Bgrade%5D%5B%5D=6&filters%5Bdomain%5D=&filters%5Bstandard%5D=6.EE.8%3A+Write+an+inequality+of+the+form+x+%3E+c...) |  |
| [Graphing Inequalities](http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/elementarymathematics/K6%20Support%20Documents/6th%20Grade%20Support/Graphing%20Inequalities%20-%20Real%20Life%20Problems.pdf) |  |  |  |  |
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| Domain: Expressions and Equations |
| **Standard: 6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distance and times, and write the equation d=65t to represent the relationship between distance and time.*** |
| General Resources[NYC Dept Ed Unit: Dance & Text](http://schools.nyc.gov/NR/rdonlyres/134A0EA3-8306-474A-BB7D-A5CF809CF22F/140800/NYCDOE_G6_Math_DanceandText_FINAL1.pdf)[ShareMyLesson](http://www.sharemylesson.com/TaxonomySearchResults.aspx?area=resources&keywords=6.EE.9)[Literature Links to 6th Grade Math](http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/elementarymathematics/K6%20Support%20Documents/Literature/6th%20Grade%20Literature%20List.pdf#page=7) (Granite School District)[Progressions For Common Core Standards](http://commoncoretools.files.wordpress.com/2011/04/ccss_progression_ee_2011_04_25.pdf#page=2) |
| **“I can” Statements** | **Engaging Activities** | **SMART Resources** | **Videos** | **Web Based Activities** | **Practice/Assessment** |
| I can use variables to represent two related quantities in a real world problemI can define independent and dependent variablesI understand the relationship between independent and dependent valuesI can write an equation to express the relationship between independent and dependent variablesI can construct a table showing the relationship between independent and dependent variablesI can analyze the relationship between independent and dependent variables using tablesI can relate an equation to a table of valuesI can translate graphical and numerical data in tables to an equationI can construct a graph showing the relationship between independent and dependent variable. | [Chocolate Bar Sales](http://www.illustrativemathematics.org/illustrations/806) In this task students use different representations to analyze the relationship between two quantities and to solve a real world problem. The situation presented provides a good opportunity to make connections between the information provided by tables, graphs and equations. In the later part of the problem, the numbers are big enough so that using the formula is the most efficient way to solve the problem; however, creative use of the table or graph will also work | [Simple Algebra Tiles](http://exchange.smarttech.com/details.html?id=6577b867-b012-4551-b3c6-0be8df718c26) |  | [LearnZillion 6.EE.9](http://learnzillion.com/lessons?utf8=%E2%9C%93&filters%5Bsubject%5D=math&query=&filters%5Bgrade%5D%5B%5D=6&filters%5Bdomain%5D=&filters%5Bstandard%5D=6.EE.9%3A+Use+variables+to+represent+two+quanti...) | [Gasoline Consumption](http://www.ccsstoolbox.com/parcc/PARCCPrototype_main.html) (Assessment task-Mathematics Common Core Toolbox) with 6.RP.3 |
|  |  |  |  | [Inches and Centimeters](http://www.ccsstoolbox.com/parcc/PARCCPrototype_main.html) (Assessment task-Mathematics Common Core Toolbox) with 6.RP.1 |
|  |  |  |  | [Training](http://www.milc.fcps.net/forum/forums/thread-view.asp?tid=1062) (Verbal Task Directions) |