

7th Grade Mathematics

“I Can” Statements

Integer Operations

- I can add / subtract integers. 7.NS.1
- I can multiply / divide integers. 7.NS.2
- I can explain and apply the additive inverse property. 7.NS.1

Simplify Expressions

- I can write equivalent expressions by adding like terms. 7.EE.1
- I can write equivalent expressions by using the distributive property. 7.EE.1

Solving Equations (integers only)

- I can solve one-step and two-step equations. 7.EE.3
- I can solve equations when I have to add like terms. 7.EE.4
- I can solve equations when I have to use the distributive Property. 7.EE.4

Equations from Story Problems

- I can write and solve equations for multi-step real-life problems. 7.EE.2

Rational Operations - decimals and fractions (calculators allowed)

- I can add / subtract rational numbers. 7.NS.1
- I can multiply / divide rational numbers. 7.NS.2

Simplify Expressions - decimals and fractions

- I can write equivalent expressions by adding like terms. 7.EE.1
- I can write equivalent expressions by using the distributive property. 7.EE.1

Solving Equations - decimal and fractions

- I can solve one-step and two-step equations. 7.EE.3
- I can solve equations when I have to add like terms. 7.EE.4
- I can solve equations when I have to use the distributive property. 7.EE.4

Equations from Story Problems - decimals and fractions

- I can write and solve equations for multi-step real-life problems. 7.NS.3

Solving Inequalities

- I can solve one-step and two-step inequalities. 7.EE.3 & 4
- I can solve inequalities when adding like terms and using the distributive property are necessary. 7.EE.3 & 4
- I can write and solve inequalities for multi-step real-life problems. 7.EE.3 & 4

Ratios / Unit Rates

- I can understand and apply unit rates. 7.RP.1
- I can compute unit rates associated with ratios of fractions, including lengths, areas, and other quantities measured in like or different units. 7.RP.1
- I can identify the unit rate in tables, graphs, equations, diagrams, and verbal descriptions. 7.RP.1

Scale Drawings

- I can solve problems from scale drawings of geometric figures. 7.G.1
- I can reproduce a scale drawing with a different scale. 7.G.1

Proportions

- I can determine whether two quantities are proportional from either a table or graph. 7.RP.2
- I can write an equation for a proportional relationship in the form $y = kx$. 7.RP.2
- I can interpret and explain what a point (x, y) means on a proportional graph, paying special attention to $(0, 0)$ and $(1, r)$ where r is the unit rate.
- I can analyze and use proportional relationships and models to solve real-world and mathematical. 7.RP.2

Percent

- I can use proportional reasoning to solve percent problems. 7.RP.3
- I can find the percent of a number. 7.RP.3
- I can solve real-life percent applications. 7.RP.3
- I can calculate percent increase, decrease, and error. 7.RP.3
- I can convert between percents / fractions / decimals. 7.NS.2

Probability Basics

- I understand that the probability of an event is from 0 to 1 or 0% to 100%. 7.SP.5
- I understand the meaning of 0, 1, and 0.5 probability. 7.SP.5

Theoretical vs Experimental Probability

- I can perform an experiment and collect data. 7.SP.6
- I can relate theoretical probability and experimental relative frequency. 7.SP.6
- I can find the probability from an experiment and estimate the long-run frequency for an event. 7.SP.6

Evaluating Probability Models

- I can create a uniform probability model. 7.SP.7
- I can use probability models to find the probability of an event. 7.SP.7

Compound Events and Probability

- I can represent probability of simple and compound events. 7.SP.8
- I can find the sample space of a compound event. 7.SP.8
- I can create lists, tables, and tree diagrams for compound events. 7.SP.8
- I can use simulation to determine probability. 7.SP.8

Angles

- I understand properties of supplementary, complementary, vertical, and adjacent angles and can use the properties to solve for unknown angle measurements. 7.G.5
- I can write and solve equations based on a diagram of intersecting lines. 7.EE.4

Triangles

- I can draw triangles from three measures of angles or sides. 7.G.2
- I can determine conditions for constructing a unique triangle, more than one, or no triangles. (SSA) 7.G.2

Circles

- I can find the area and circumference of a circle. 7.G.4
- I can informally describe the relationship between circle area and circumference. 7.G.4

Area

- I can find the area of triangles, quadrilaterals, polygons and composite figures, including those found in real-world contexts. 7.G.6
- I can find the surface area of cubes, right prisms, and right pyramids whose faces are triangles, quadrilaterals, and polygons, including those found in real-world contexts. 7.G.6

Cross-Sections of 3D Figures

- I can describe different ways to slice a 3D figure. 7.G.3
- I can describe the shape of the 2D cross-sections resulting from slicing a 3D figure. 7.G.3

Volume

- I can find the volume of cubes, right prisms, and composite polyhedral including those found in real-world context. 7.G.6

Samples From a Population

- I can use random sampling to draw inferences about a population. 7.SP.1 & 2

Measures of Center and Spread

- I understand that measures of center are independent of measures of variability (spread). 7.SP.3

Comparing Populations

- I can use statistics to compare two populations. 7.SP.4