

Below are the key skills that students should possess by the end of an 8<sup>th</sup> grade math course. They are based on the Common Core State Standards and are written in student-friendly terms. The learning targets are grouped by unit of study, and the corresponding state standards and textbook resources are listed.

Power Standard	#	Learning Target	CCSSM	OFM Block	Lesson
Solving Equations (Unit 1)	1	I can simplify algebraic expressions.	7 <sup>th</sup> grade		3
	2	I can solve single-variable equations.	8.EE.7b	LE1	4-6
	3	I can graph points on the coordinate plane.	8.SP.1		7
Rate of Change and Start Value (Unit 2)	4	I can determine the rate of change, start value, and equation using tables.	8.F.4, 8.EE.6, 8.F.3		10-13
	5	I can determine the rate of change, start value, and equation using graphs.		LE2	14, 17
	6	I can determine the rate of change, start value, and equation using two points.	8.F.4		15, 18
Linear Equations (Unit 3)	7	I can graph direct variation equations.	8.EE.5, 8.F.2	LE3	3B
	8	I can graph using Slope-Intercept form.	8.F.3	CCSS	16
	9	I can determine if a set of data is a function.	8.EE.5, 8.F.1,2		21, 3C
Systems (Unit 4)	10	I can determine the number of solutions in a system of equations.	8.EE.8a		22
	11	I can solve a system of equations using graphs.			23
	12	I can solve a system of equations using tables.		LE4	24
	13	I can solve a system of equations using substitution.	8.EE.8		25
	14	I can solve a system of equations using elimination.			26
Two-Variable Statistics (Unit 5)	15	I can make predictions using the line of best fit.	8.SP.1,8.SP.3		21
	16	I can write the equation of a trend line, interpret the slope and y-intercept, and use these to make predictions.	8.SP.1-3	DA4	22-25, 3I
	17	I can predict using a best fit equation.	8.SP.1-3		23

**CCSSM = Common Core State Standards for Math**

EE = Expressions and Equations

G = Geometry

RP = Ratios and Proportional Relationships

NS = The Number System

SP = Statistics and Probability

**OFM = Oregon Focus on Math**

FD = Fractions and Decimals

IA = Introductory Algebra

CT = Companion Text

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Angles, Parallel Lines, Transversals (Unit 6)	18	I can use alternate exterior and interior angle properties.	8.G.5		5
	19	I can use corresponding and same-side interior angle properties.	8.G.5	LA1	6
Triangles (Unit 7)	20	I can find the missing measures of an angle in a triangle.	8.G.5	LA2	8, 9
	21	I can determine if two triangles are congruent or similar.	8.G.2,4		10, 11
Pythagorean Theorem (Unit 8)	22	I can use and estimate square roots.	8.EE.2, 8.NS.1-2	LA3	14, 15
	23	I can use the Pythagorean Theorem.	8.G.6,7		16-18
	24	I can find the distance between two points.	8.G.8		19, 20
Exponents (Unit 9)	25	I can convert a repeating decimal to a fraction.	8.NS.1	CCSS	3D
	26	I can apply properties of exponents.	8.EE.1		3E, 3F
	27	I can write a number in scientific notation.	8.EE.3		3G
	28	I can compute using scientific notation.	8.EE.4		3H
Volume and Transforma- tions (Unit 10)	29	I can use roots to solve equations with exponents.	8.EE.2	CCSS	3J
	30	I can find the volume of a cylinder, cone and sphere. (NM)	8.G.9		3K-3M
	31	I can describe the changes on a coordinate plane after a dilation, rotation, translation and reflection and prove that two figures are similar or congruent.	8.G.3		3N-3P

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