

Alignment of Accuplacer Math Topics with Khan Academy and the Common Core

Revised July 2014

Course Topic	Khan Videos	Khan Practice Sets	Core Standard(s)	Applied Tasks
Arithmetic				
Adding/Subtracting Integers	Adding Integers With Different Signs Adding Negative Numbers	Adding Negative Numbers Adding and Subtracting Negative Numbers	CCSS.Math.Content.7.NS.A.1c CCSS.Math.Content.7.NS.A.1d	The Locker Problem Number Rules
Multiplying/Dividing Integers	Multiplying Positive and Negative Numbers Dividing Positive and Negative Numbers Multiplying Numbers With Different Signs	Multiplying and Dividing Negative Numbers Negative Number Word Problems	CCSS.Math.Content.7.NS.A.2a CCSS.Math.Content.7.NS.A.2b	Never Prime Divisibility Problem
Rounding Numbers	Rounding Decimals	Rounding Numbers	CCSS.Math.Content.5.NBT.A.4	Adding and Subtracting Signed Numbers
Number Line	Points on a Number Line Positive and Negative Decimals on a Number Line	Decimals on the Number Line 1 Decimals on the Number Line 2 Decimals on the Number Line 3	CCSS.Math.Content.6.NS.C.6	
Square Roots	Approximating Square Roots	Square Roots Estimating Square Roots	CCSS.Math.Content.8.EE.A.2	
Fractions				
	Identifying Fraction Parts Understanding Fractions as Division (conceptual help)	Recognizing Fractions Fraction Word Problems (conceptual help)		
Ordering Fractions	Plotting Fractions on the Number Line	Fractions on the Number Line	CCSS.Math.Content.3.NF.A.2	Multiplying Fractions Word Problems
Adding/Subtracting Fractions	Adding and Subtracting Fractions Adding Fractions with Different Signs	Adding and Subtracting Fractions	CCSS.Math.Content.5.NF.A.1	
Multiplying Fractions	Multiplying Fractions Multiplying Negative and Positive Fractions	Multiplying Fractions	CCSS.Math.Content.5.NF.B.4	Dividing Fractions Word Problems
Dividing Fractions	Dividing Fractions Example Dividing Fractions by Fractions	Dividing Whole Numbers by Fractions Dividing Fractions by Fractions	CCSS.Math.Content.6.NS.A.1	Fair Shares- Open-Ended Word Problem Fractions Jigsaw
Decimals and Percents				
Place Value	Decimal Place Value Comparing Decimal Place Value	Understanding Decimal's Place Value Comparing Decimal Place Value	CCSS.Math.Content.5.NBT.A.3	Adding and Subtracting Decimals Word Problems (Khan)
Adding/Subtracting Decimals	Adding Decimals 1 Adding Decimals 2 Adding Decimals 3	Adding Decimals 1 Adding Decimals 2 Subtracting Decimals 1	CCSS.Math.Content.6.NS.B.3	

	<u>Subtracting Decimals</u>	<u>Subtracting Decimals 2</u>		<u>More Adding and Subtracting Decimals Word Problems</u>
Multiplying/Dividing Decimals	<u>Multiplying Decimals</u> <u>Multiplying Decimals- More Involved</u> <u>Dividing Decimals</u> <u>Dividing Decimal Numbers</u>	<u>Multiplying Decimals 1</u> <u>Multiplying Decimals 2</u> <u>Multiplying Decimals 3</u> <u>Dividing Decimals 1</u> <u>Dividing Decimals 2</u> <u>Dividing Decimals 3</u>	<u>CCSS.Math.Content.6.NS.B.3</u>	<u>Money Word Problems</u> <u>Another Money Word Problem</u>
Solving Percent Problems	<u>Describing the Meaning of Percent</u> <u>Taking Percentages</u> <u>Percent Word Problems</u>	<u>Percentage Word Problems 1</u>	<u>CCSS.Math.Content.6.RP.A.3c</u>	<u>Ratios Game</u>
Equating Decimals, Percents, Fractions	<u>Representing a Number as a Decimal, Percent, and Fraction</u>	<u>Converting Decimals to Fractions 1</u> <u>Converting Decimals to Percents</u> <u>Converting Percents to Decimals</u>	<u>CCSS.Math.Content.6.NS.A.1</u>	<u>Math in Special Effects: Ratios Problem</u>
Writing and Solving Proportions	<u>Writing Proportions</u> <u>Finding an Unknown in a Proportion</u> <u>Using Proportions to Solve Problems</u>	<u>Writing Proportions</u> <u>Solving Proportions 1</u> <u>Using Proportions to Solve Problems</u>	<u>CCSS.Math.Content.7.RP.A.2a</u> <u>CCSS.Math.Content.7.RP.A.2c</u>	
Simplifying Rates and Ratios	<u>Simplifying Rates and Ratios</u>	<u>Ratio Word Problems</u>	<u>CCSS.Math.Content.7.RP.A.2a</u> <u>CCSS.Math.Content.7.RP.A.2b</u>	
Real Numbers				
Absolute Value	<u>Absolute Value and Number Lines</u> <u>Absolute Value Word Problems</u>	<u>Finding Absolute Value</u> <u>Absolute Value Word Problems</u>	<u>CCSS.Math.Content.6.NS.C.7c</u>	<u>Working with Irrational Numbers</u>
Order of Operations/Simplifying Exp.	<u>Order of Operations 1</u> <u>Order of Operations- More Complicated</u>	<u>Order of Operations</u> <u>Order of Operations with Negative Numbers</u>	<u>CCSS.Math.Content.7.EE.A.1</u>	
Exponents and Roots				
Multiplying/Dividing Monomials	<u>Multiplying and Dividing Monomials 1</u> <u>Multiplying and Dividing Monomials 2</u> <u>Multiplying and Dividing Monomials 3</u>	<u>Simplifying Rational Expressions 1</u>	<u>CCSS.Math.Content.8.EE.A.1</u>	<u>Ponzi Schemes Problem</u> <u>Big and Small Numbers in the Physical World</u> <u>Negative Power</u>
Evaluating Rational Exponents/Roots	<u>Radical Equivalent to Rational Exponents</u> <u>Simplifying with Exponent Properties</u> <u>Negative Fractional Exponent Examples</u>	<u>Understanding Fractional Exponents</u> <u>Manipulating Fractional Exponents</u> <u>Negative Fractional Exponents</u>	<u>CCSS.Math.Content.HSN-RN.A.1</u>	

Polynomials				
Adding/Subtracting Polynomials	Adding and Subtracting Polynomials 1 Adding Polynomials With Multiple Variables	Adding and Subtracting Polynomials	CCSS.Math.Content.HSA-APR.A.1	Finding Factors
Multiplying Polynomials	Multiplying Binomials Multiplying Polynomials	Multiplying Polynomials Multiplying Binomials 1 Multiplying Binomials 2	CCSS.Math.Content.HSA-APR.A.1	Difference of Squares Exploration (Plus/Minus)
Distributive Property	Multiplying Monomials by Polynomials		CCSS.Math.Content.HSA-APR.A.1	Roots of Polynomials (Poly Fibs)
Factoring Polynomials	Factoring Quadratic Expressions Factoring Polynomials 1 Factoring Trinomials With a Common Factor Factoring Difference of Squares	Factoring Polynomials 1 Factoring Polynomials With Two Variables Factoring Difference of Squares 2	CCSS.Math.Content.HSA-SSE.B.3a	Polynomial Relations
Solving Equations and Inequalities				
Solving Linear Equations	Solving One-Step Equations Two-Step Equations Multi-Step Equation Example Solving Equations With the Distributive Property	One-Step Equations 2-step Equations Multi-Step Equations With Distribution	CCSS.Math.Content.HSA-CED.A.1 CCSS.Math.Content.HSA-REI.A.2 CCSS.Math.Content.HSA-REI.B.3	Predicting Sports Records Sky High Scrapers
Solving Linear Inequalities	One-Step Inequalities Interpreting Inequalities with Examples Multi-Step Inequalities 3	One-Step Inequalities Multi-Step Linear Inequalities	CCSS.Math.Content.HSA-CED.A.1 CCSS.Math.Content.HSA-REI.B.3	Kitchen Paraboloids (Quadratics Problem)
Solving Quadratics by Factoring	Solving a Quadratic by Factoring Recognizing a Perfect Square Quadratic	Solving Quadratics by Factoring Solving Quadratics by Factoring 2	CCSS.Math.Content.HSA-SSE.B.3a CCSS.Math.Content.HSA-CED.A.1 CCSS.Math.Content.HSA-REI.B.4	Agile Algebra: Challenging Equations
Graphing Quadratics	Graphing a Quadratic Function Graphs of Quadratic Functions	Graphs of Quadratic Functions Graphing Parabolas in Vertex Form	CCSS.Math.Content.HSA-APR.B.3	
Graphs and Linear Functions				
Word Problems with Linear Equations	Basic Linear Equation Word Problems	Linear Equation Word Problems	CCSS.Math.Content.HSA-CED.A.1	Restaurant Management Problem Temperature Equation
Geometry and Measurement				
Scale and Measurement	Interpreting Scale Drawings Constructing Scale Drawings	Interpreting Scale Drawings Constructing Scale Drawings	CCSS.Math.Content.3.MD.B.3 CCSS.Math.Content.5.MD.A.1	Geometry Word Problems from fi.edu
Area, Perimeter,	Perimeter and Area Basics	Area of Triangles 1	CCSS.Math.Content.HSG-MG.A.1	

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Circumference	<u>Finding Dimensions from Area and Perimeter</u> <u>Radius, Diameter and Circumference</u> <u>Area of a Circle</u>	<u>Area of Triangles 2</u> <u>Area of Squares and Rectangles</u> <u>Perimeter 1</u> <u>Perimeter of Squares and Rectangles</u> <u>Radius, Diameter and Circumference</u> <u>Area of a Circle</u> <u>Shaded Areas</u>		<u>Popcorn: Volume of Cylinders</u> <u>Fruit Boxes: Area and Volume Problem</u>
Pythagorean Theorem	<u>The Pythagorean Theorem Intro</u> <u>Pythagorean Theorem 2</u>	<u>Pythagorean Theorem</u>	<u>CCSS.Math.Content.8.G.B.7</u>	