

Integrated Math

State Standard Number	State Standard Area/Description	Unit Name	Course Topic Description
0	Number and Number Relations		
1	Identify and describe differences among natural numbers, whole numbers, integers, rational numbers, and irrational numbers	Number Sense	Throughout Unit
2	Evaluate and write numerical expressions involving integer exponents	Number Sense	Exponents
3	Apply scientific notation to perform computations, solve problems, and write representations of numbers	Operations	Scientific Notation
4	Distinguish between an exact and an approximate answer, and recognize errors introduced by the use of approximate numbers with technology	Operations	Estimation
5	Demonstrate computational fluency with all rational numbers (e.g., estimation, mental math, technology, paper/pencil)	Throughout Course	Throughout Course
6	Simplify and perform basic operations on numerical expressions involving radicals (e.g., $2 \times \text{the square root of } 3 + 5 \times \text{the square root of } 3 = 7 \times \text{the square root of } 3$)		
7	Use proportional reasoning to model and solve real-life problems involving direct and inverse variation	Operations	Proportions
0	Algebra		
8	Use order of operations to simplify or rewrite variable expressions	Operations	Order of Operations

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9	Model real-life situations using linear expressions, equations, and inequalities	Algebraic Sense	Throughout unit
10	Identify independent and dependent variables in real-life relationships		
11	Use equivalent forms of equations and inequalities to solve real-life problems	Algebraic Sense	Throughout unit
12	Evaluate polynomial expressions for given values of the variable		
13	Translate between the characteristics defining a line (i.e., slope, intercepts, points) and both its equation and graph	Algebraic Sense	Graphing Equations and Inequalities
14	Graph and interpret linear inequalities in one or two variables and systems of linear inequalities	Algebraic Sense	Graphing Inequalities
15	Translate among tabular, graphical, and algebraic representations of functions and real life situations		

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16	Interpret and solve systems of linear equations using graphing, substitution, elimination, with and without technology, and matrices using technology		
0	Measurement		
17	Distinguish between precision and accuracy		
18	Demonstrate and explain how the scale of a measuring instrument determines the precision of that instrument		
19	Use significant digits in computational problems		
20	Demonstrate and explain how relative measurement error is compounded when determining absolute error		
21	Determine appropriate units and scales to use when solving measurement problems	Measurement	Throughout Unit
22	Solve problems using indirect measurement		

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0	Geometry		
23	Use coordinate methods to solve and interpret problems (e.g., slope as rate of change, intercept as initial value, intersection as common solution, midpoint as equidistant)	Geometric Movement	Throughout Unit
24	Graph a line when the slope and a point or when two points are known	Algebraic Sense	Graphing Equations and Inequalities
25	Explain slope as a representation of "rate of change"		
26	Perform translations and line reflections on the coordinate plane	Geometric Movement	Transformations, Translations, Reflections, Rotations
0	Data Analysis, Probability, and Discrete Math		
27	Determine the most appropriate measure of central tendency for a set of data based on its distribution		
28	Identify trends in data and support conclusions by using distribution characteristics such as patterns, clusters, and outliers	Introduction to Probability	Data Concerns

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29	Create a scatter plot from a set of data and determine if the relationship is linear or nonlinear		
30	Use simulations to estimate probabilities	Number Sense	Single-Step Estimation
31	Define probability in terms of sample spaces, outcomes, and events	Introduction to Probability	Throughout Unit
32	Compute probabilities using geometric models and basic counting techniques such as combinations and permutations	Probability 2	Permutations Combinations
33	Explain the relationship between the probability of an event occurring, and the odds of an event occurring and compute one given the other	Introduction to Probability	Experimental Probability
34	Follow and interpret processes expressed in flow charts		
0	Patterns, Relations, and Functions		
35	Determine if a relation is a function and use appropriate function notation		

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36	Identify the domain and range of functions		
37	Analyze real-life relationships that can be modeled by linear functions		
38	Identify and describe the characteristics of families of linear functions, with and without technology		
39	Compare and contrast linear functions algebraically in terms of their rates of change and intercepts		
40	Explain how the graph of a linear function changes as the coefficients or constants are changed in the function's symbolic representation		