6th Grade Math

1. 6.3(E) ==multiply and divide positive rational numbers== fluently
2. 6.4(G) generate ==equivalent forms of fractions==, ==decimals==, and ==percents== using real-world problems, including problems that involve money
3. 6.5(B) solve real-world problems to ==find the whole given a part and the percent,== to find the part given the whole and the percent, and to find the percent given the part and the whole, including the use of concrete and pictorial models
4. 6.2(D) ==order a set of rational numbers== arising from mathematical and real-world contexts
5. 6.3(D) ==add, subtract, multiply, and divide integers== fluently
6. 6.4(B) apply qualitative and quantitative reasoning to solve ==prediction and comparison== of real-world problems involving ratios and rates
7. 6.4(H) ==convert units== within a measurement system, including the use of proportions and unit rates
8. 6.7(A) generate equivalent numerical expressions using ==order of operations==, including ==whole number exponents==, and ==prime factorization==
9. 6.7(D) generate equivalent expressions using the ==properties of operations: inverse, identity, commutative, associative, and distributive properties==
10. 6.10(A) ==model and solve one-variable, one-step equations and inequalities== that represent problems, including geometric concepts
11. 6.6(C) represent a given situation using verbal descriptions, tables, graphs, and equations in the form ==$y = kx$ or $y = x + b$==
12. 6.11(A) ==graph points in all four quadrants== using ordered pairs of rational numbers
13. 6.8(D) determine solutions for problems involving the ==area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive== rational numbers

7th Grade Math

1. 7.3(B) apply and extend previous understandings of operations to solve problems using ==addition, subtraction, multiplication, and division of rational numbers==.
2. 7.11(A) model and solve ==one-variable, two-step equations and inequalities==.
3. 7.4(A) represent ==constant rates of change== in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including d=rt.
4. 7.4(D) solve problems involving ==ratios, rates, and percents==, including multi-step problems involving percent increase and percent decrease, and financial literacy problems.
5. 7.5(C) solve mathematical and real-world problems involving ==similar shape and scale== drawings.
6. 7.6 (G) solve problems ==using data represented in bar graphs, dot plots, and circle graphs==, including part-to-whole and part-to-part comparisons and equivalents.
7. 7.6(H): solve problems using qualitative and quantitative ==predictions and comparisons== from simple experiments.
8. 7.6(I) determine experimental and theoretical ==probabilities related to simple and compound events== using data and sample spaces.
9. 7.7(A) represent ==linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form $y = mx + b$==
10. 7.9(A) solve problems involving the ==volume or rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramids==.
11. 7.9(B) determine the ==circumference and area of circles==.

12. 7.9(C) determine the ==area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles==.

8th Grade Math

1. 8.2(D) ==order a set of real numbers== arising from mathematical and real-world contexts.
2. 8.8(C) model and ==solve one-variable equations with variables on both sides of the equal sign== that represent mathematical and real-world problems using rational number coefficients and constants.
3. 8.12(D) calculate and ==compare simple interest and compound interest earnings==.
4. 8.4(C) use data from a table or graph to determine the ==rate of change or slope and y-intercept== in mathematical and real-world problems.
5. 8.4(B) ==graph proportional relationships, interpreting the unit rate as the slope== of the line that models the relationship
6. 8.5(G==) identify functions== using sets of ordered pairs, tables, mappings, and graphs.
7. 8.5(D) use a ==trend line== that approximates the linear relationship between bivariate sets of data to make predictions.
8. 8.5(I) write an equation in the ==form y= mx + b to model a linear relationship between two quantities== using verbal, numerical, tabular, and graphical representations.
9. 8.3 (C) use an algebraic representation to explain the effect of a given positive ==rational sale factor applied to two dimensional figures on a coordinate plane== with the origin as the center of dilation.
10. 8.10(C) explain the effect of ==translations,== reflections over the X or Y-axis, and rotations limited to 90°, 180°, 270°, 360° as applied to two-dimensional shapes on a coordinate plane using an algebraic representation.
11. 8.7(C) use ==the Pythagorean theorem and its converse== to solve problems.
12. 8.7(A) solve problems involving the ==volume of cylinders, cones, and spheres==.
13. 8.7(B) use previous knowledge of surface area to make connections to the formulas for ==lateral and total surface area and determine solutions for problems involving rectangular prisms, triangular prisms, and cylinders==.