**Implementing the Common Core State Standards through Mathematical Problem Solving**

**Grades 6 - 8**

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| **Standard** | **Task #** | **Domain** |  | **Task description** | **Mathematical Practice Addressed** |
| 6.RP.1 , 6.RP.3 | 1.1 | Ratio and Proportion | Ratio Reasoning: | Basketball | MP1, MP2 |
| 6.RP.1 | 1.2 | Ratio and Proportion | Ratio Reasoning: | Apps to Books | MP1, MP2 |
| 6.RP.2 | 1.5 | Ratio and Proportion |  | Proportion | MP1, MP4 |
| 6.NS.1 | 2.1 | Number System | Dividing Fraction: | Find Quotient |  |
| 6.NS.1 | 2.2 | Number System | Dividing Fractions | Compare Candy Cost | MP1, MP4, MP5, MP7 |
| 6.NS.1 | 2.3 | Number System | Dividing Fractions | Dividing Licorice strips | MP1, MP4, MP5, MP7 |
| 6.NS.3, 6.NS.5 | 2.4 | Number System | Decimals and Rational Numbers | Determine values given sum | MP2, MP8 |
| 6.NS.3 | 2.5 | Number System | Decimals and Rational Numbers | Determine product given product | MP2, MP8 |
| 6.NS.6a, 6.NS.6c | 2.6 | Number System | Decimals and Rational Numbers | Estimate value on number line | MP2, MP8 |
| 6.NS.4 | 2.7 | Number System | Greatest Common Factor | School Plant sale | MP4, MP5, MP7 |
| 6.NS.4 | 2.8 | Number System | Greatest Common Factor | Rate walking track | MP4, MP5, MP7 |
| 6.G.1, 6.G.3 | 3.1 | Geometry | Area in Coordinate Plane | Plot triangle and find Area, Find Error | MP2, MP3, MP7 |
| 6.G.3 | 3.2 | Geometry | Volume of Right Prisms | Given 12 cu. Units, Height is? | MP2, MP3, MP7 |
| 6.SP.1, 6.SP.3 | 4.1 | Statistics and Probability | Statistical Variability and Measures of Center | Flight costs | MP3, MP4, MP5 |
| 6.SP.4, 6.SP.5 | 4.2 | Statistics and Probability | Plotting Data | Continuation of 4.1 w technology | MP3, MP4, MP5 |
| 6.SP.4, 6.SP.5 | 4.3 | Statistics and Probability | Comparing Data | Box and Whisker of 4.1 data | MP3, MP4, MP5 |
| 6.EE.1 | 5.1 | Expressions and Equations | Evaluating Expressions –Exponents | Volume of a cube | MP3, MP7 |
| 6.EE.2c, 6.EE.3, 6.EE.4 | 5.2 | Expressions and Equations | Evaluating Expressions-Order of Operations | Who’s right? | MP3 |
| 6.EE.2a,b,c, 6.EE.5, 6.EE.6 | 5.5 | Expressions and Equations | Equations – Introduction | Secret Number | MP1, MP2 |
| 6.EE.8 | 5.6 | Expressions and Equations | Inequalities | Post office Packages | MP1, MP2, MP4 |
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| 7.RP.3 | 1.3 | Ratio and Proportion | Percent | Teeth Cleaning | MP3, MP4 |
| 7.RP.3 | 1.4 | Ratio and Proportion | Percent | Coupon | MP3, MP4 |
| 7.RP2a,2b,2c,2d | 1.5 | Ratio and Proportion | Proportion | Chocolate | MP1,MP4 |
| 7.RP.1, 7RP.2, 7.RP.3 | 1.6 | Ratio and Proportion | Proportion | Cupcake Recipe | MP1, MP4 |
| 7.NS.1a, 7.NS.1c | 2.4 | Number System | Decimals and Rational Numbers | Determine values given sum | MP2, MP8 |
| 7.NS.2, 7.NS.3 | 2.5 | Number System | Decimals and Rational Numbers | Determine product given product | MP2, MP8 |
| 7.NS.2, 7.NS.3 | 2.6 | Number System | Decimals and Rational Numbers | Estimate value on number line | MP2, MP8 |
| 7.G.1, 7.G.3 | 3.1 | Geometry | Area in Coordinate Plane | Plot triangle and find Area, Find Error | MP2, MP3, MP7 |
| 7.G.3 | 3.2 | Geometry | Volume of Right Prisms | Given 12 cu. Units, Height is? | MP2, MP3, MP7 |
| 7.G.6 | 3.3 | Geometry | Vol of shapes | Overflowing ta ank | MP1, MP4 |
| 7.G.4, 7.G.6, 7.RP.3 | 3.4 | Geometry | Area, Perimeter, Circumference, Ratio and Percent | Restaurant Square/Round Table | MP1, MP4 |
| 7.G.4 | 3.5 | Geometry | Area, Circumference | Which pizza is cheaper? | MP1, MP4 |
| 7.SP.3, 7.SP.4 | 4.3 | Statistics and Probability | Comparing Data | Box and Whisker of 4.1 data | MP3, MP4, MP5 |
| 7.SP.1, 7.SP.2 | 4.4 | Statistics and Probability | Inference | Jelly Beans | MP2, MP4, MP5 |
| 7.SP.3 | 4.5 | Statistics and Probability | Comparing Data | Temperatures across U.S. | MP1, MP2, MP4 |
| 7.EE.1 | 5.2 | Expressions and Equations | Evaluating Expressions-Order of Operations | Who’s right? | MP3 |
| 7.EE.2 | 5.3 | Expressions and Equations | Evaluation Expressions - Equality |  | MP4, MP7 |
| 7.EE.1 | 5.5 | Expressions and Equations | Equations – Introduction | Secret Number | MP1, MP2 |
| 7.EE.4b | 5.6 | Expressions and Equations | Inequalities | Post office Packages | MP1, MP2, MP4 |
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| 8.F.4 | 1.1 | Ratio and Proportion |  | Ratio Reasoning: Basketball | MP1, MP2 |
| 8.F.4 | 1.3 | Ratio and Proportion |  | Percent: Teeth Cleaning | MP3, MP4 |
| 8.F.2, 8.F.4 | 1.5 | Ratio and Proportion |  | Proportion: Chocolate | MP1, MP4 |
| 8.NS.2, 8.G.8 | 2.9 | Number System | Irrational Numbers | Circle/Pythagorean Thm/Coordinate Plane | MP5, MP7 |
| 8.G.9 | 3.3 | Geometry | Vol of shapes | Overflowing ta ank | MP1, MP4 |
| 8.G.7 | 3.4 | Geometry | Area, Perimeter, Circumference, Ratio and Percent | Restaurant Square/Round Table | MP1, MP4 |
| 8.SP.1 | 4.5 | Statistics and Probability | Comparing Data | Temperatures across U.S. | MP1, MP2, MP4 |
| 8.SP.1, 8.SP.2 | 4.6 | Statistics and Probability | Comparing Data | NY Data-Double Line Graph | MP1, MP2, MP4 |
| 8.SP.1, 8.SP.2, 8.SP.3, 8.SP.4, 8.SP.5 | 4.7 | Statistics and Probability | Scatterplots | NY Data-Scatterplots | MP1, MP2, MP4 |
| 8.SP.1, 8.SP.2, 8.SP.3, 8.SP.4, 8.SP.5 | 4.8 | Statistics and Probability | Scatterplost | NY Data-Scatterplots | MP1, MP2, MP4 |
| 8.F.4  8.F.5 | 5.3 | Expressions and Equations and Functions | Evaluation Expressions-Equality, Functions | Increase sales in clothing store | MP1, MP2 |
| 8.EE.1 | 5.4 | Expressions and Equations and Functions | Evaluation Expressions- Negative Exponents | Make Conjecture about negative exponents | MP3, MP7 |
| 8.EE.8 | 5.7 | Expressions and Equations and Functions | Simultaneous Equations | Puzzle to introduce simultaneous eqns | MP1, MP2, MP4 |
| 8.F.1, 8.F.3, 8.F.4 | 5.8 | Expressions and Equations and Functions | Functions | Pattern, what is 100th pattern? | MP2, MP4 |
| 8.EE.5, 8.F.4, 8.EE.6 | 5.9 | Expressions and Equations and Functions | Functions | Cooking rice for company | MP2, MP4, MP8 |