**Implementing the Common Core State Standards through Mathematical Problem Solving for High School**

Algebra

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| Standard | Task description | Mathematical Practice Addressed |
| A-SSE.2 | Task 1.1 Multiplying pairs of factors | 1,4,6,7 |
| A-SSE.2 | Task 1.2 Concrete approach to factoring | 1,4,6,7 |
| A-APR.7 | Task 1.3 Splitting the cost of a gift  | 1,3,,4,7 |
| A-APR.7 | Task 1.4 Perimeter of a rectangle | 1,3,4,7 |
| A-CED.2 ; A-CED.3 | Task 1.5 Determining price of JPad based on Supply and Demand | 4,5,6 |
| Launch to Graph Linear Eqns | Task 1.6 The sum of two numbers is 10. | 6,7 |
| Launch to graph linear inequalities | Task 1.7 The sum of two numbers is less than 10. | 6,7 |
| Quadratic Formula launch | Task 1.8 Solve by completing the square | 6,7 |

Functions

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| Standard | Task description | Mathematical Practice Addressed |
| F-BF | 2.1 Introduction to functions | 2,3,4 |
| F-BF | 2.2 Introduction to function notation | 2,3,4 |
| F-BF | 2.3 Decide if a function or not | 2,3,4 |
| F-BF | 2.4 Interpret functions that arise in context | 2,3,4 |
| F-BF , F-LE | 2.5 cell phone plan | 4.5 |
| F-BF , F-LE | 2.6 Use as launch to composition of functions | 4.5 |
| F-LE | 2.7 Make conjectures on output values & was relationship additive/multiplicative | 4,7,8 |
| F-LE | 2.8 Determine a function that fits given data | 4,7,8 |
| F-LE.5 | 2.9 Launch exponential functions  | 4,7,8 |
| F-TF | 2.10 Discover relationships between constants and coefficients and coefficients of various parts of function and graphs | 4,5,7 |
| F-TF | 2.11 Explore data that fits sinusoidal pattern | 4,5,7 |

Geometry

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| G.CO | 3.1 Congruence of triangles based on length | 1,3,4,5 |
| G.CO | 3.2 Prove that triangles within a figure are congruent | 1,3,4,5 |
| G.SRT | 3.3 Concept of similar figures | 2,3,4,7 |
| G.SRT | 3.4 To solidify concepts in proportions in similar triangles | 2,3,4,7 |
| G.GPE | 3.5 Translate between geometric description and equation for a conic section | 1,5,7 |
| G.C | 3.6 Explore relationship between different angles that intercept same arcs | 5,8 |
| G.C | 3.7 Discover more specific relationships of circles | 5,8 |
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Statistics and Probability

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| S-ID | 4.1 Observe general trend of bivariate data and represent data graphically | 2,4,5 |
| S-ID | 4.2 Develop understanding of relationship of r-value | 2,4,5 |
| S-ID, F-IF, F-BF,F-LE | 4.3 Life Expectancy | 2,4,5 |
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