## Unit 3: Quadratics (Vertex/Factored Form)

Q1/Q2: Determine the basic properties of quadratics relations. Relate transformations of the graph of $y=x^{2}$ to the algebraic representation $y=a(x-h)^{2}+k$.

|  | Topic | Check Your Understanding |
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| 3.1 | Investigating Non-Linear Relationships | p. 166 \#C1,2,3,5 p. 172 \#3 |
| 3.2 | Properties of Quadratic Relations | Set 1: p. 172 \#1 (graph by hand) \#2, 6, 9 (with Desmos) <br> Set 1: p. 172 \#1 (graph by hand) \#2, 5, 6, 9 (with technology) |
| 3.3A | Investigating Transformations | p. 178 \#2,3,6,7,9 |
| 3.3B | Investigating Transformations | p. 178 \#C2,4,8,13,14 |
| 3.4A | Graphing: Vertex Form | Set 1: p. 185 \#C3,1adh, 2bdfg, 3, 4, 6 <br> Set 2: p. 185 \#C3,1adh, 2bdfg, 3, 4, 6, 7 |
| 3.4B | Graphing Practice | Handout 3.4 |
| 3.5 | Applications: Vertex Form | Handout: 3.5 Word Problems - Vertex Form |
| 3.6 | Creating Quadratic Equations | Set 1: p. 186 \# 7b, 8, 9, 10a, 18 <br> Set 2: p. 186 \# 8, 9, 10, 13, 15, 18 |
| 3.7 | Graphing: Factored Form (need technology) | Set 1: p. 192 \#3,4,5,7,8,10,11 <br> Set 2: p. 192 \#3,4,5,7,8,10,11 |
|  | Review | p. 202 \#1-10 \& p. 204 \#1-11 |

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