Algebra 1 – Quiz Review Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Quadratic Characteristics & Graphing Standard Form Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| **CHARACTERISTICS** |
| Vertex |  |
| Domain |  |
| Range |  |
| Increasing Interval |  |
| Decreasing Interval |  |
| Zeros |  |
| Y-intercept |  |
| Maximum |  |
| Minimum |  |
| Axis of Symmetry |  |
| Left End Behavior | As x🡪-∞, y🡪 |
| Right End Behavior | As x🡪∞, y🡪 |

Fill in the characteristics of the graphs below.

1. y = -2x2 + 8x – 5

|  |
| --- |
| **CHARACTERISTICS** |
| Vertex |  |
| Domain |  |
| Range |  |
| Increasing Interval |  |
| Decreasing Interval |  |
| Zeros |  |
| Y-intercept |  |
| Maximum |  |
| Minimum |  |
| Axis of Symmetry |  |
| Left End Behavior | As x🡪-∞, y🡪 |
| Right End Behavior | As x🡪∞, y🡪 |

2. y = 2x2 – 12x + 16

Graph each of the following equations. Answer the given questions.

3. y = x2 – 4x + 6 Opens: up or down

 Is the vertex a max or a min? \_\_\_\_\_

Axis of Symmetry: \_\_\_\_\_\_\_\_\_\_

 Vertex: \_\_\_\_\_\_\_\_\_\_

y-intercept: \_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| **x** | **y** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



4. y = -2x2 – 16x – 31 Opens: up or down

|  |  |
| --- | --- |
| **x** | **y** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

 Is the vertex a max or a min? \_\_\_\_\_

Axis of Symmetry: \_\_\_\_\_\_\_\_\_\_

 Vertex: \_\_\_\_\_\_\_\_\_\_

y-intercept: \_\_\_\_\_\_\_\_\_\_



5. y = ½x2 – 2x – 2 Opens: up or down

|  |  |
| --- | --- |
| **x** | **y** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| **x** | **y** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

 Is the vertex a max or a min? \_\_\_\_\_

Axis of Symmetry: \_\_\_\_\_\_\_\_\_\_

 Vertex: \_\_\_\_\_\_\_\_\_\_

y-intercept: \_\_\_\_\_\_\_\_\_\_