**Unit 4: Curve Fitting** 1/2/2019

* Directions: Sketch the function from the given the parent function, points (locator & pass-thru). Write the equation of the function. Try all the different types of functions.

**Quadratic:**

|  |  |
| --- | --- |
| 1) , vertex (-4,3), passing thru (0,7) | 2) , vertex (-5,2), passing thru (-3,3) |
| 3) , vertex (-5,-3), passing thru (-4,-5) | 4) , vertex (-2,-1), passing thru (-4,3) |

**Radical (square & cube roots):**

|  |  |
| --- | --- |
| 1) , y-int. (0,5), passing thru (4,7) | 2) , y-int. (0,-2), passing thru (4,0) |
| 3) , min point (4,-2), passing thru (5,-1) | 4) , y-int. (0,-2), passing thru (8,0) |

Absolute Value

|  |  |
| --- | --- |
| 1) , vertex (2,0), passing thru (6,4) | 2) , vertex (0,-1), passing thru (-4,-5) |
| 3) , vertex (1.5, 0), passing thru (3,6) | 4) , vertex (2,3), passing thru (1,-3) |

**Cubic (and two more radicals):**

|  |  |
| --- | --- |
| 1) , inflection point (4,-3), passing thru (5,-2) | 2) , inflection point (-1,2), passing thru (0,3) |
| 3) , min point (2,-1), passing thru (6,7) | 4) , max point (1,4), passing thru (3,3) |

**Equation Key:**

|  |  |  |  |
| --- | --- | --- | --- |
| Quadratic | | | |
| 1) | 2) | 3) | 4) |
| Radical | | | |
| 1) | 2) | 3) | 4) |
| Absolute Value | | | |
| 1) | 2) | 3) | 4) |
| Cubic & more Radical | | | |
| 1) | 2) | 3) | 4) |