**Library of Functions ANSWERS**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Equation** | **Graph** |  |
| 1 | Constant | Screen Shot 2013-01-06 at 6 | |  | | --- | | **Set**  **D:** **R:** | | **Interval**  **D:**  **R:** **or** | | **Symmetry: y-axis (y=0 also has x-axis and origin)** | | **Even/Odd/Neither**  **Even, (y=0 is both Even and Odd)** | | **End Behavior** | |
| 2 | Identity | Screen Shot 2013-01-06 at 5 | |  | | --- | | **Set**  **D:**  **R:** | | **Interval**  **D:**  **R:** | | **Symmetry: Origin, y=x** | | **Even/Odd/Neither: Odd** | | **End Behavior** | |
| 3 | Absolute  Value | Screen Shot 2013-01-06 at 5 | |  | | --- | | **Set**  **D:**   **R:** | | **Interval**  **D:**  **R:** | | **Symmetry: y-axis** | | **Even/Odd/Neither: Even** | | **End Behavior** | |
| 4 | Quadratic | Screen Shot 2013-01-06 at 5 | |  | | --- | | **Set**  **D:**   **R:** | | **Interval**  **D:**  **R:** | | **Symmetry: y-axis** | | **Even/Odd/Neither: Even** | | **End Behavior** | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | Square Root | Screen Shot 2013-01-06 at 5 | |  | | --- | | **Set**  **D:**  **R:** | | **Interval**  **D:**   **R:** | | **Symmetry: none** | | **Even/Odd/Neither: none** | | **End Behavior** | |
| 6 | Reciprocal | Screen Shot 2013-01-09 at 7 | |  | | --- | | **Set**  **D:**  **R:** | | **Interval**  **D:**  **R:** | | **Symmetry: origin, y=x** | | **Even/Odd/Neither: Odd** | | **End Behavior** | |
| 7 | Cubic | Screen Shot 2013-01-06 at 5 | |  | | --- | | **Set**  **D:**  **R:** | | **Interval**  **D:**  **R:** | | **Symmetry: Origin** | | **Even/Odd/Neither: Odd** | | **End Behavior** | |
| 8 | Cube Root | Screen Shot 2013-01-06 at 5 | |  | | --- | | **Set**  **D:**  **R:** | | **Interval**  **D:**  **R:** | | **Symmetry: Origin** | | **Even/Odd/Neither: Odd** | | **End Behavior** | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | Greatest  Integer | Screen Shot 2013-01-06 at 5 | |  | | --- | | **Set**  **D:**   **R:** | | **Interval**  **D:**   **R: N/A** | | **Symmetry: None** | | **Even/Odd/Neither: None** | | **End Behavior**  ; | |
| 10 | Reciprocal  of a Square | Screen Shot 2013-01-09 at 7 | |  | | --- | | **Set**  **D:**  **R:** | | **Interval**  **D:**  **R:** | | **Symmetry: y-axis** | | **Even/Odd/Neither: Even** | | **End Behavior** | |
| 11 | Semicircle | Screen Shot 2013-01-06 at 5 | |  | | --- | | **Set**  **D:**  **R:** | | **Interval**  **D:**  **R:** | | **Symmetry: y-axis** | | **Even/Odd/Neither: Even** | | **End Behavior**  ; | |
| 12 | Exponential  Growth | Macintosh HD:Users:teacher:Desktop:Screen Shot 2016-01-26 at 3.02.17 PM.png | |  | | --- | | **Set**  **D:**   **R:** | | **Interval**  **D:**  **R:** | | **Symmetry: none** | | **Even/Odd/Neither: Neither** | | **End Behavior** | |

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| 13 | Exponential  Decay | Macintosh HD:Users:teacher:Desktop:Screen Shot 2016-01-26 at 3.02.30 PM.png | |  | | --- | | **Set**  **D:**   **R:** | | **Interval**  **D:**  **R:** | | **Symmetry: none** | | **Even/Odd/Neither: Neither** | | **End Behavior** | |
| 14 | Natural  Logarithm | Screen Shot 2013-01-09 at 7 | |  | | --- | | **Set**  **D:**  **R:** | | **Interval**  **D:**  **R:** | | **Symmetry: none** | | **Even/Odd/Neither: Neither** | | **End Behavior** | |