|  |  |
| --- | --- |
| **f(x) = x** |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Linear****f(x) = x****Table of Values**Choose two positive values, two negative values, and zero for **x**

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

 | Sketch the graph of the function accurately and neatly. Use a ruler if necessary!Related image |

|  |  |
| --- | --- |
| **f(x) = |x|** |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **AbsoluteValue****f(x) = |x|****Table of Values**Choose two positive values, two negative values, and zero for **x**

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

 | Sketch the graph of the function accurately and neatly. Use a ruler if necessary!Related image |

|  |  |
| --- | --- |
|  |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Polynomial****(Quadratic)****f(x) = x²****Table of Values**Choose two positive values, two negative values, and zero for **x**

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

 | Sketch the graph of the function accurately and neatly. Use a ruler if necessary!Related image |

|  |  |
| --- | --- |
|  |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |
| --- | --- |
| **f(x) = x²** |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Radical****(Square Root)****Table of Values**Use reasonable values for **x**

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

 | Sketch the graph of the function accurately and neatly. Use a ruler if necessary!Related image |

|  |  |
| --- | --- |
|  |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |
| --- | --- |
| **f(x) =** $\sqrt{x}$ |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Polynomial****(Cubic)****f(x) = x³****Table of Values**Choose two positive values, two negative values, and zero for **x**

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

 | Sketch the graph of the function accurately and neatly. Use a ruler if necessary!Related image |

|  |  |
| --- | --- |
|  |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |
| --- | --- |
| **f(x) = x³** |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Radical****(Cube Root)****Table of Values**Choose two positive values, two negative values, and zero for **x**

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

 | Sketch the graph of the function accurately and neatly. Use a ruler if necessary!Related image |

|  |  |
| --- | --- |
|  |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |
| --- | --- |
| **f(x) =** $\sqrt[3]{x}$ |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Exponential****Growth****f(x) =** $2^{x}$**Table of Values**Choose two positive values, two negative values, and zero for **x**

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

 | Sketch the graph of the function accurately and neatly. Use a ruler if necessary!Related image |

|  |  |
| --- | --- |
| **f(x) =** $2^{x}$ |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Logarithm****f(x) = logx****Table of Values**Use the values in the table for **x**

|  |  |
| --- | --- |
| **x** | **y** |
| **100** |  |
| **10** |  |
| **1** |  |
| **0.1** |  |
| **0.01** |  |

 | Sketch the graph of the function accurately and neatly. Use a ruler if necessary!Related image |

|  |  |
| --- | --- |
| **f(x) = logx** |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Exponential****Decay****Table of Values**Choose two positive values, two negative values, and zero for **x**

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

 | Sketch the graph of the function accurately and neatly. Use a ruler if necessary!Related image |

|  |  |
| --- | --- |
|  |  |
| Domain(interval) |  |
| Range(interval) |  |
| Increasinginterval(s) |  |
| Decreasinginterval(s) |  |
| Positiveinterval(s) |  |
| Negativeinterval(s) |  |
| x-intercept(s) |  |
| y-intercept(s) |  |
| Does the graph go through the origin? |  |
| End behavior |  |