Parent Function

Booklet

By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Parabola | Hyperbola | Ellipse | Conic Section |  | Circle | Conic Section |
|  |  |  | Sketch of Graph |  | Sketch of Graph |
|  |  |  | Horizontal Transformation Equation |  | Transformation Equation |
|  |  |  | Vertical Transformation Equation |

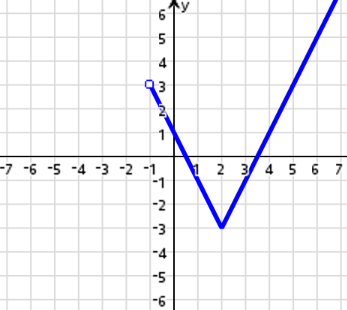
Transformation Equation

General Function – Module 1

Scale Change

|  |  |  |
| --- | --- | --- |
|  | Negative | Positive |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Characteristics of Functions



Domain:

Range:

Zero(s):

End Behavior: As

As

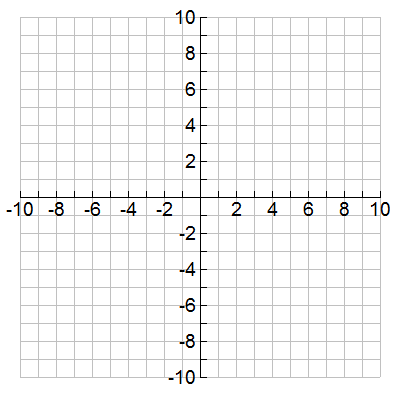
Needed to Write Equation

Logarithmic Function – Module 15 & 16

Additional Notes:

Parent Function Name:

Equation:

Graph:

x f(x)

Transformation Equation:

Domain:

Range:

End Behavior: As

As

x-intercept(s):

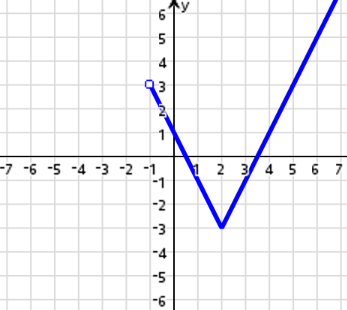
y-intercept:

Vertex or Critical Point:

Axis of Symmetry:

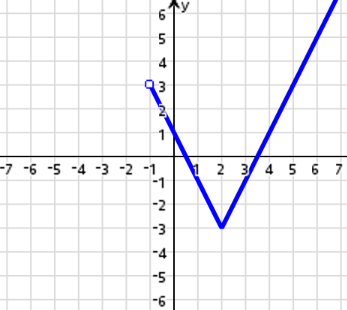
Asymptotes:

Characteristics of Functions – Module 1



Increasing Interval(s):

Decreasing Interval(s):

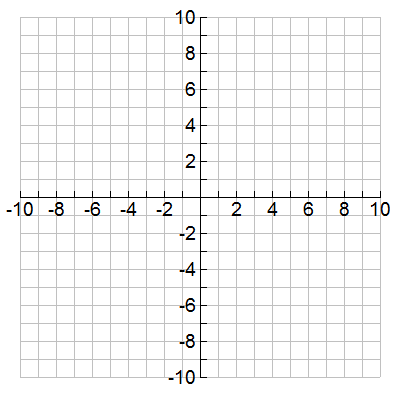


Positive Interval(s):

Negative Interval(s):

Parent Function Name:

Equation:

Graph:

x f(x)

Transformation Equation:

Domain:

Range:

End Behavior: As

As

x-intercept(s):

y-intercept:

Vertex or Critical Point:

Axis of Symmetry:

Asymptotes:

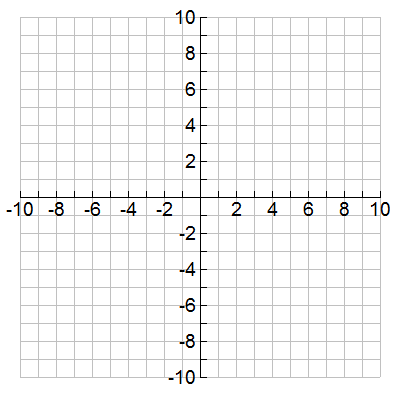
Needed to Write Equation

Exponential Function – Module 13

Additional Notes:

Parent Function Name:

Equation:

Graph:

x f(x)

Transformation Equation:

Domain:

Range:

End Behavior: As

As

x-intercept(s):

y-intercept:

Vertex or Critical Point:

Axis of Symmetry:

Asymptotes:

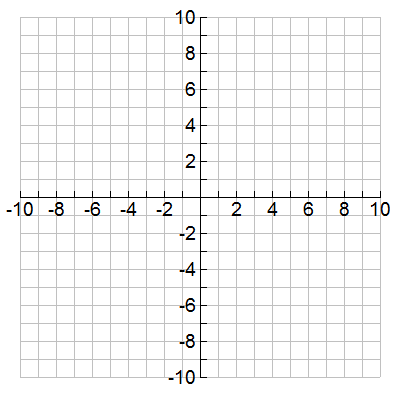
Needed to Write Equation

Absolute Value Function – Module 2

Additional Notes:

Parent Function Name:

Equation:

Graph:

x f(x)

Transformation Equation:

Domain:

Range:

End Behavior: As

As

x-intercept(s):

y-intercept:

Vertex or Critical Point:

Axis of Symmetry:

Asymptotes:

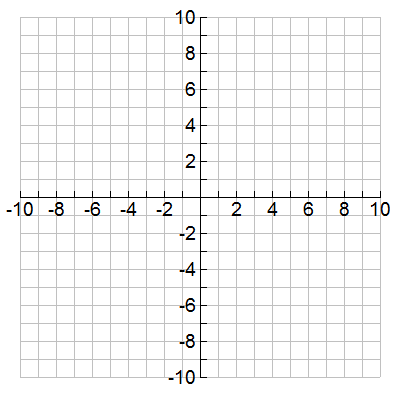
Needed to Write Equation

Cube Root Function – Module 11 & 12

Additional Notes:

Parent Function Name:

Equation:

Graph:

x f(x)

Transformation Equation:

Domain:

Range:

End Behavior: As

As

x-intercept(s):

y-intercept:

Vertex or Critical Point:

Axis of Symmetry:

Asymptotes:

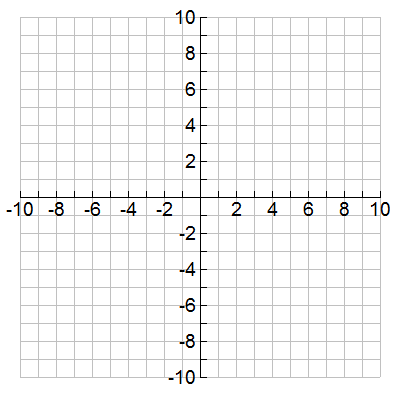
Needed to Write Equation

Quadratic Function – Module 3 & 4

Additional Notes:

Parent Function Name:

Equation:

Graph:

x f(x)

Transformation Equation:

Domain:

Range:

End Behavior: As

As

x-intercept(s):

y-intercept:

Vertex or Critical Point:

Axis of Symmetry:

Asymptotes:

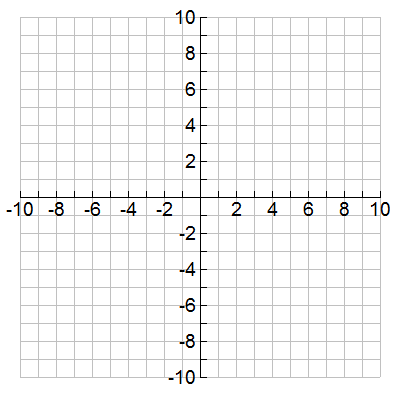
Needed to Write Equation

Square Root Function – Module 11 & 12

Additional Notes:

Parent Function Name:

Equation:

Graph:

x f(x)

Transformation Equation:

Domain:

Range:

End Behavior: As

As

x-intercept(s):

y-intercept:

Vertex or Critical Point:

Axis of Symmetry:

Asymptotes:

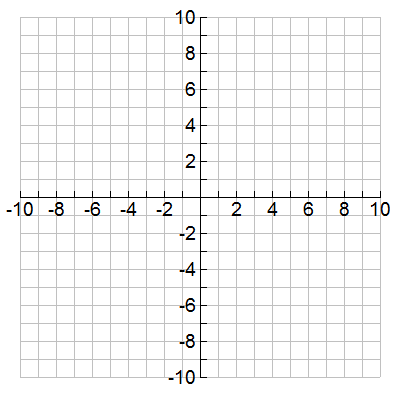
Needed to Write Equation

Cubic Function – Module 6, 7, & 8

Additional Notes:

Parent Function Name:

Equation:

Graph:

x f(x)

Transformation Equation:

Domain:

Range:

End Behavior: As

As

x-intercept(s):

y-intercept:

Vertex or Critical Point:

Axis of Symmetry:

Asymptotes:

Needed to Write Equation

Rational Function – Module 9 & 10

Additional Notes: