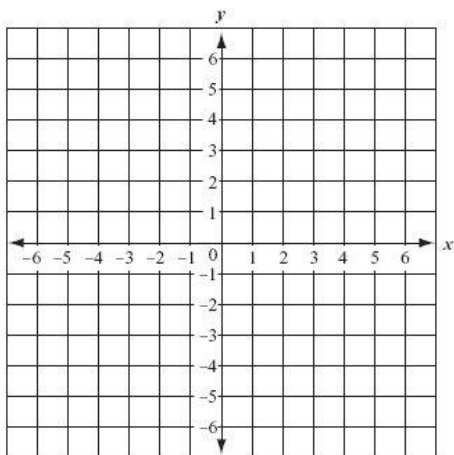


Name: _____ Hour: _____ Date: _____

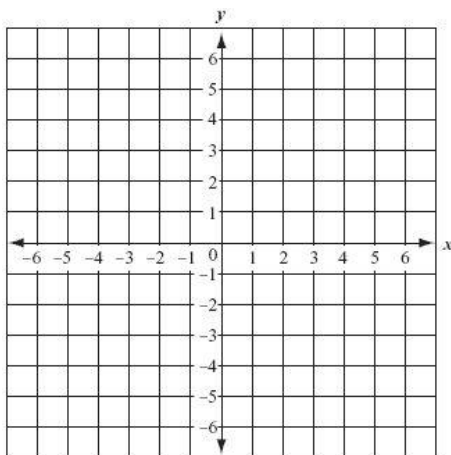
Parent Functions Test Review Guide HONORS

Write the equation of the parent function and sketch its graph.

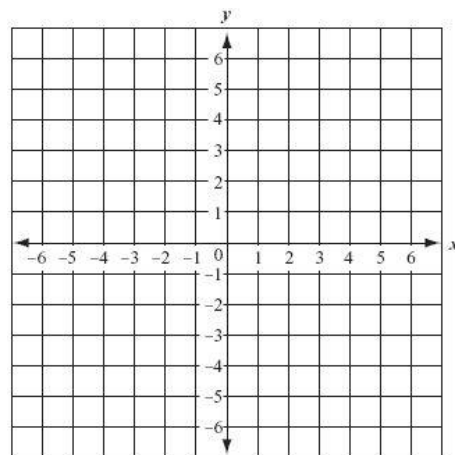
Absolute value _____



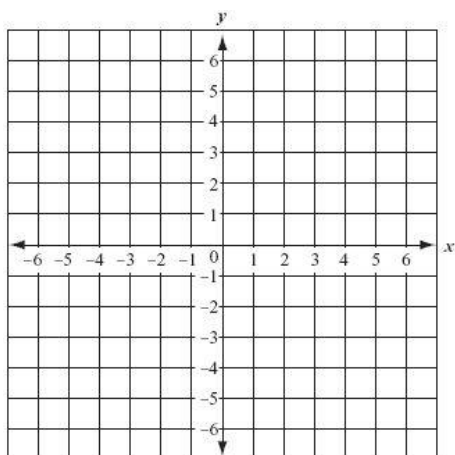
Polynomial (Quadratic) _____



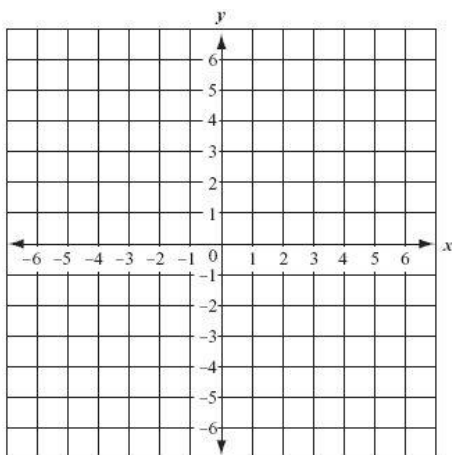
Exponential Growth _____



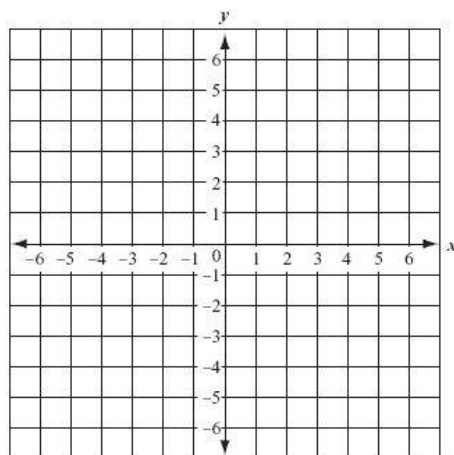
Radical (Square Root) _____



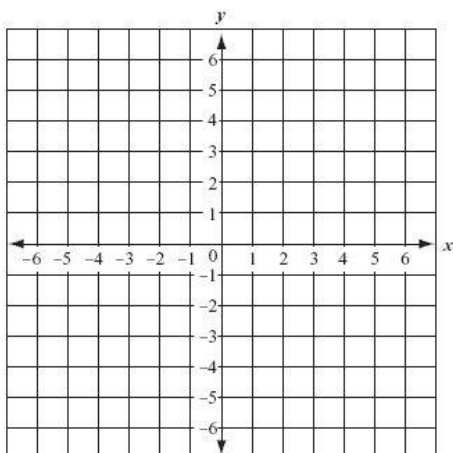
Exponential Decay _____



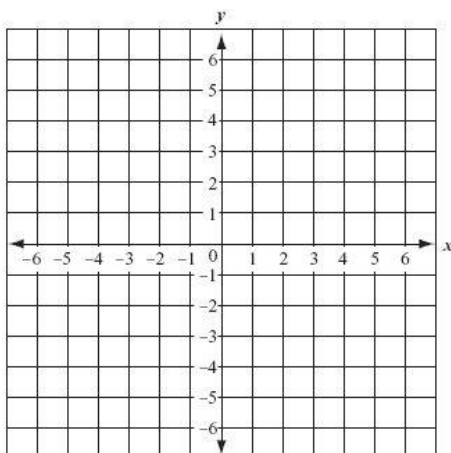
Polynomial (Cubic) _____



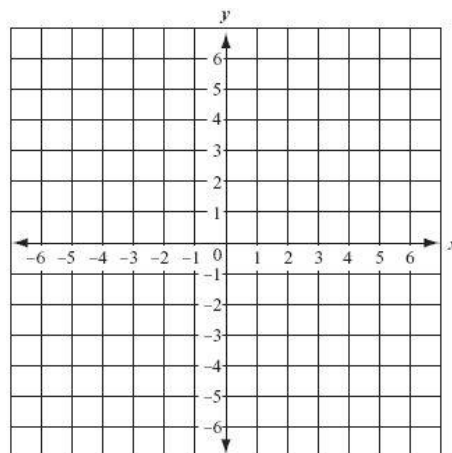
Linear _____



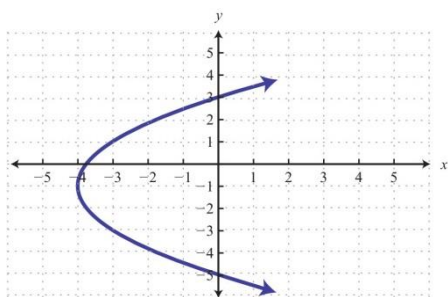
Radical (Cube root) _____



Logarithm _____

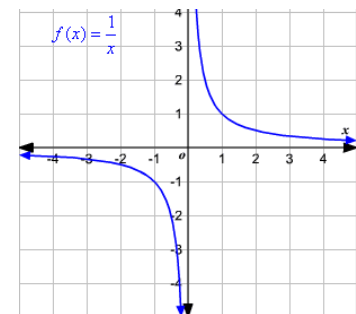


Determine if the following graphs represent functions. Describe your reasoning using the words DOMAIN and RANGE.



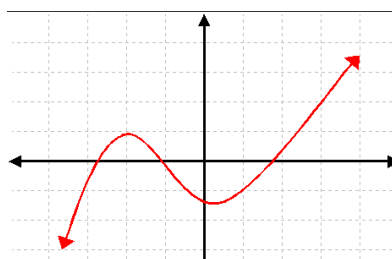
Function? _____

Explanation: _____



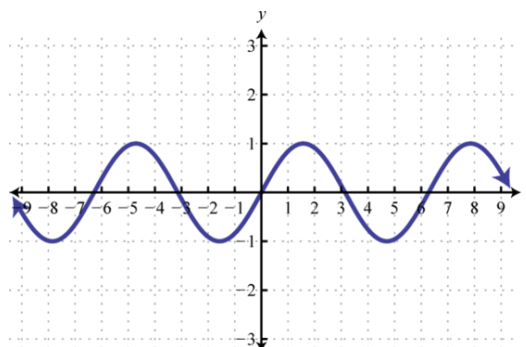
Function? _____

Explanation: _____



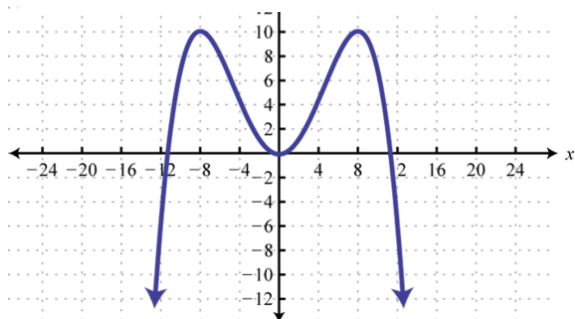
Function? _____

Explanation: _____



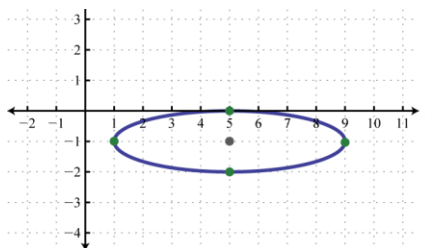
Function? _____

Explanation: _____



Function? _____

Explanation: _____



Function? _____

Explanation: _____

List the key features of each of the following graphs. Use interval notation when necessary.

Domain:

Constant:

Range:

x-intercepts:

Increasing:

y-intercepts:

Decreasing:

Max/Min:

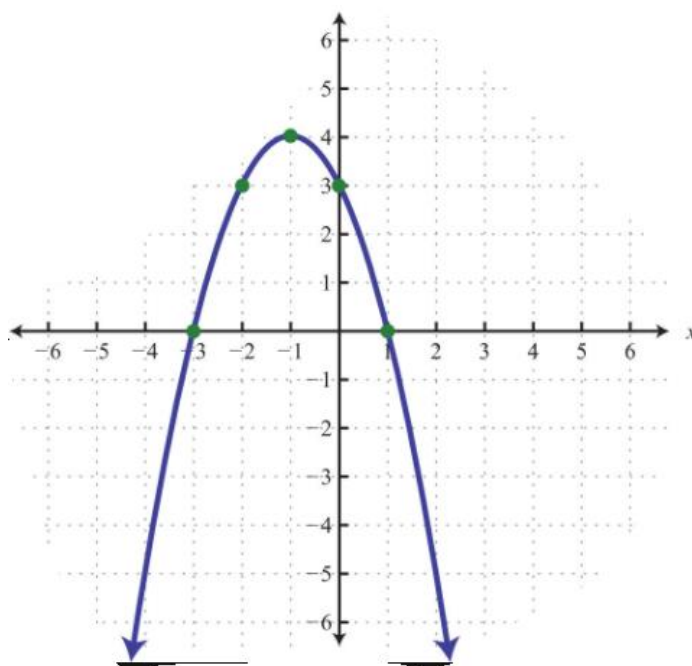
Positive:

Negative:

End Behavior:

Left:

Right:



Domain:

Constant:

Range:

x-intercepts:

Increasing:

y-intercepts:

Decreasing:

Max/Min:

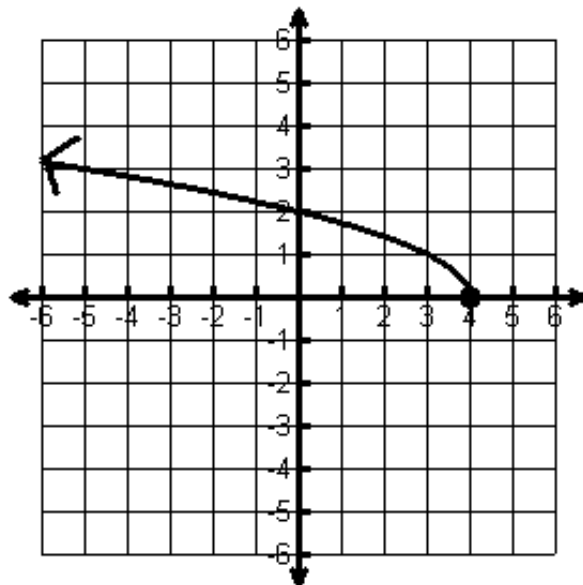
Positive:

Negative:

End Behavior:

Left:

Right:



Domain:

Range:

Increasing:

Decreasing:

Positive:

Negative:

Constant:

x-intercepts:

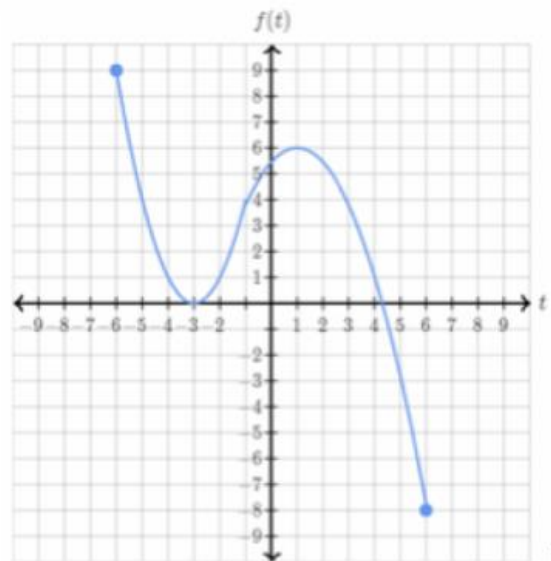
y-intercepts:

Max/Min:

End Behavior:

Left:

Right:



Domain:

Range:

Increasing:

Decreasing:

Positive:

Negative:

Constant:

x-intercepts:

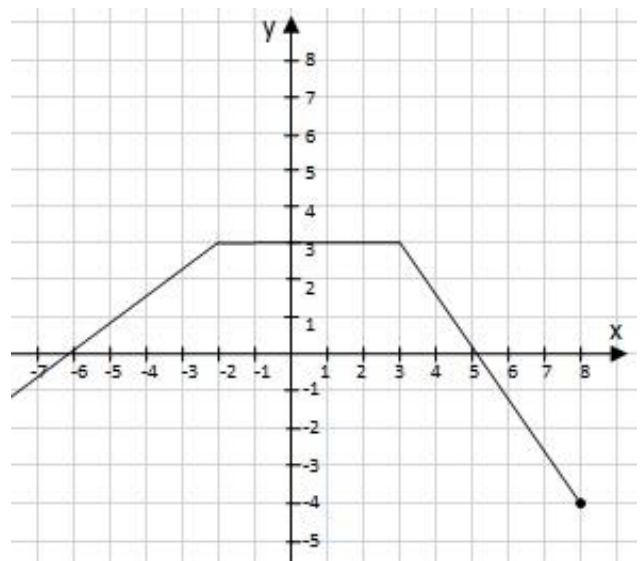
y-intercepts:

Max/Min:

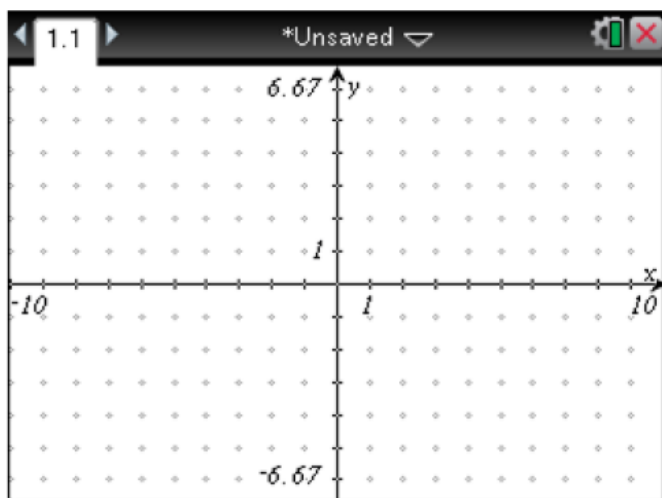
End Behavior:

Left:

Right:



Sketch a function that meets the following conditions:

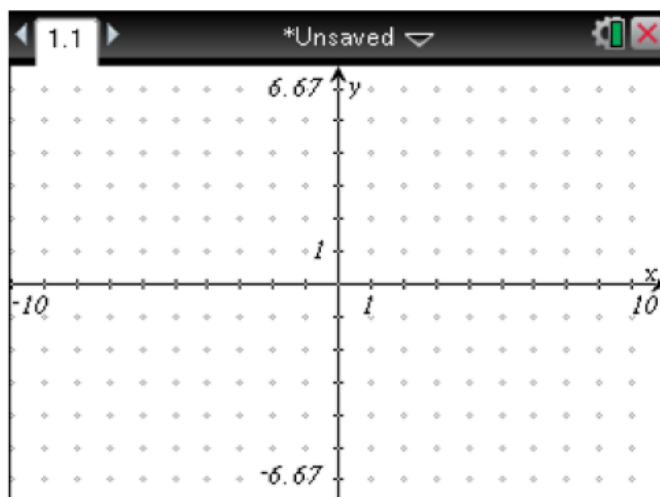


Domain: $(-2, 4]$

Range: $(-5, 6]$

Domain: $(-\infty, 8]$

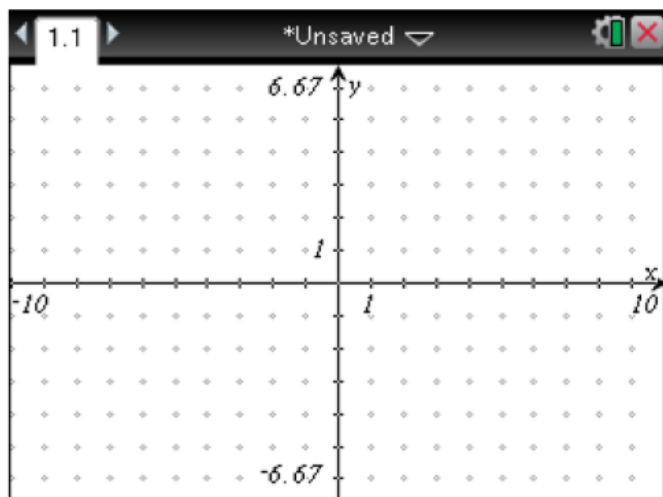
Range: $(-\infty, 2]$

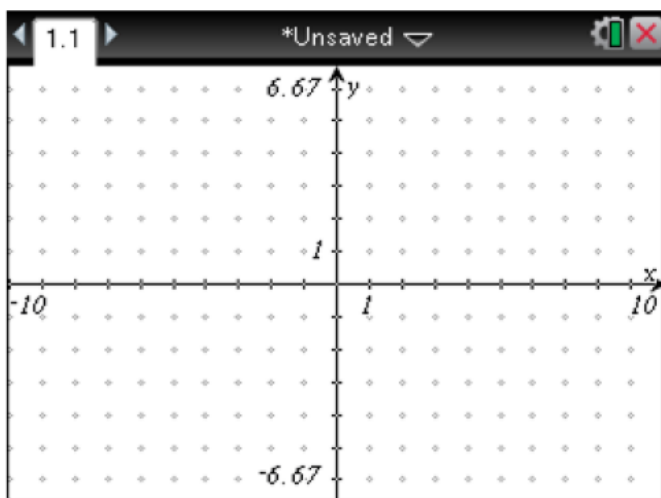


Domain: $(-4, 6)$

Range: $[-3, 5]$

With at least one increasing and at least one decreasing interval.





Domain: $(-6, 7]$

Range: $(-4, 5]$

With a decreasing interval of $(-6, 4)$
and an increasing interval of $(4, 7)$

Domain: $(0, +\infty)$

Range: $(4, +\infty)$

With *both* a vertical and
horizontal asymptote.

