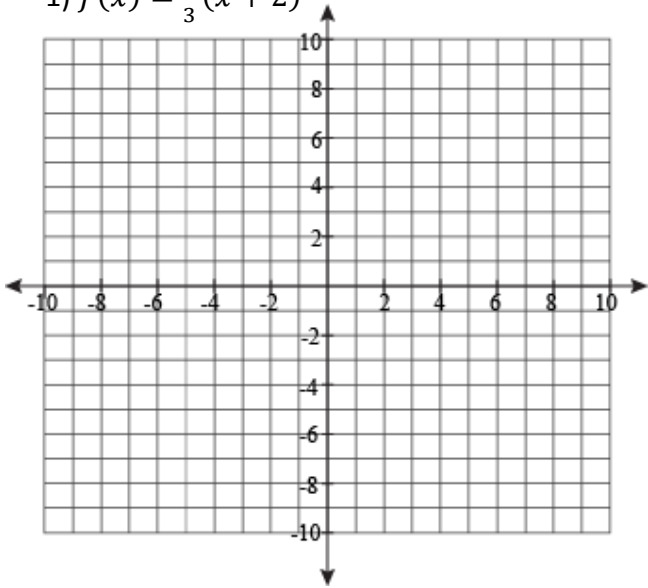


Graphing Cubic and Cube Root Functions

Name: _____

Graph and identify the following attributes for each function.

1) $f(x) = \frac{1}{3}(x + 2)^3$



x	f(x)

Vertex: _____

Increasing: _____

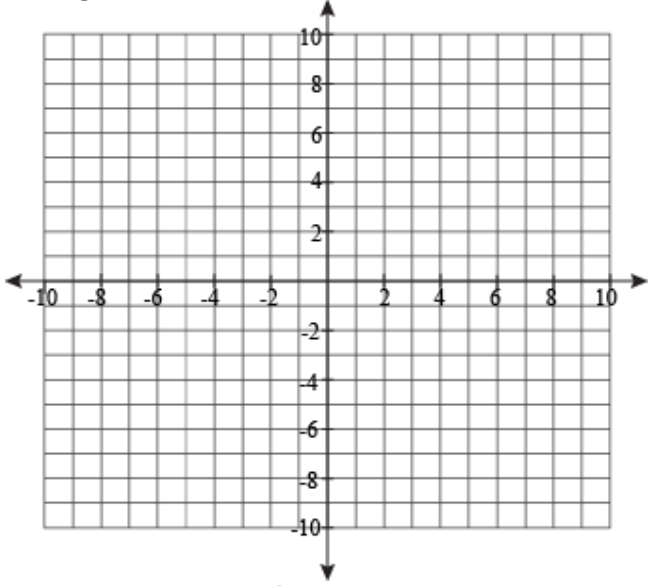
Decreasing: _____

Domain: _____ Range: _____

x-intercept: _____ y-intercept: _____

End behavior: _____

2) $g(x) = 2\sqrt[3]{x - 3} + 1$



x	g(x)

Vertex: _____

Increasing: _____

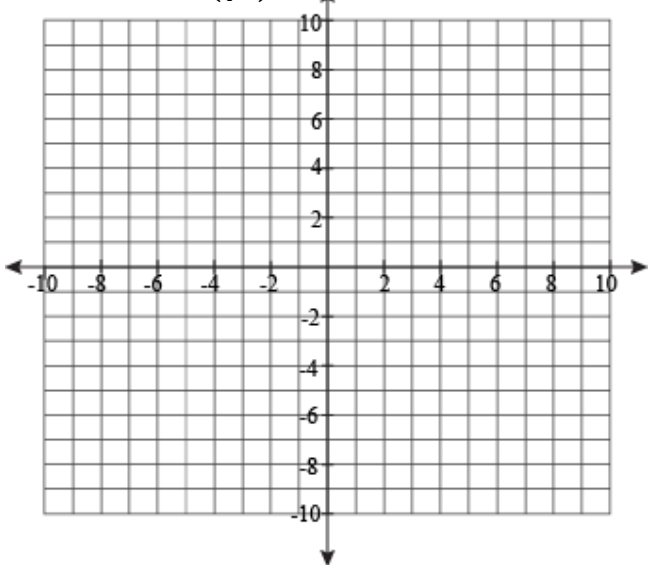
Decreasing: _____

Domain: _____ Range: _____

x-intercept: _____ y-intercept: _____

End behavior: _____

3) $h(x) = 2\left(\frac{1}{4}x\right)^3 - 1$



x	h(x)

Vertex: _____

Increasing: _____

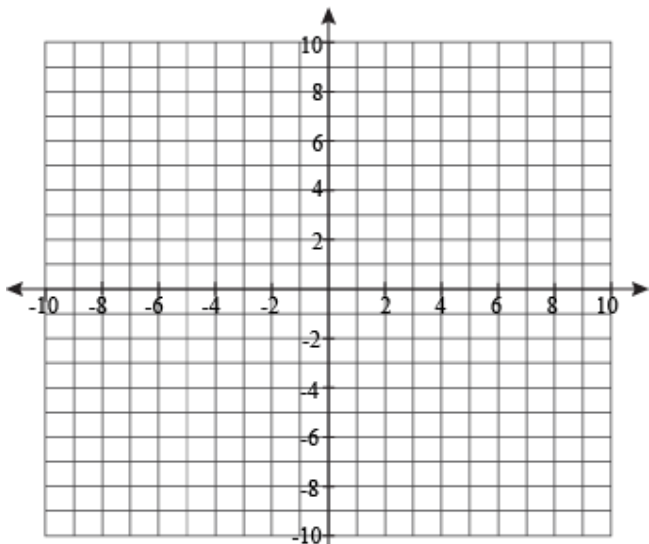
Decreasing: _____

Domain: _____ Range: _____

x-intercept: _____ y-intercept: _____

End behavior: _____

4) $f(x) = -(2x + 6)^3 - 4$



x	f(x)

Vertex: _____

Increasing: _____

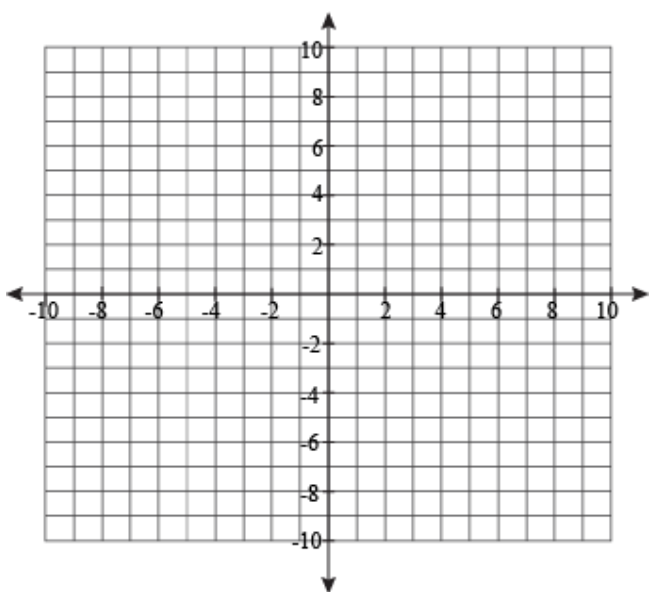
Decreasing: _____

Domain: _____ Range: _____

x-intercept: _____ y-intercept: _____

End behavior: _____

5) $g(x) = \frac{1}{2} \sqrt[3]{-(x + 6)}$



x	g(x)

Vertex: _____

Increasing: _____

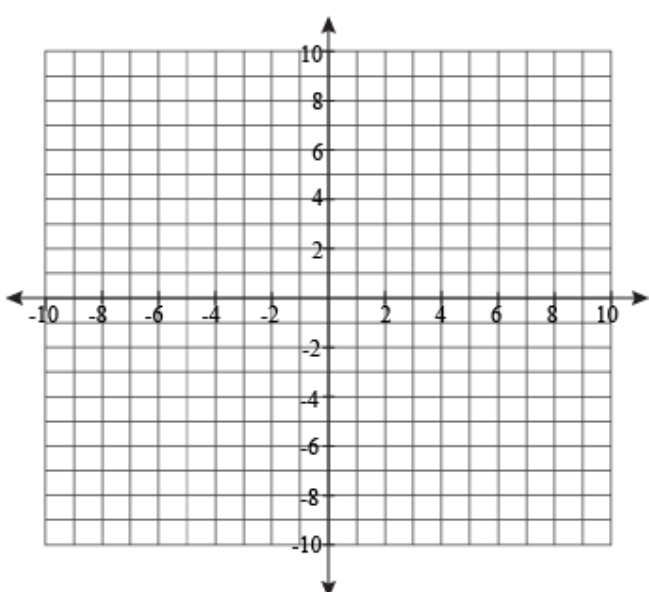
Decreasing: _____

Domain: _____ Range: _____

x-intercept: _____ y-intercept: _____

End behavior: _____

6) $h(x) = -\sqrt[3]{3x - 9} + 3$



x	h(x)

Vertex: _____

Increasing: _____

Decreasing: _____

Domain: _____ Range: _____

x-intercept: _____ y-intercept: _____

End behavior: _____