

Unit 1 Day 2 – Graph Characteristics

Warm Up

Find the domain and range of each. Please write in interval notation.

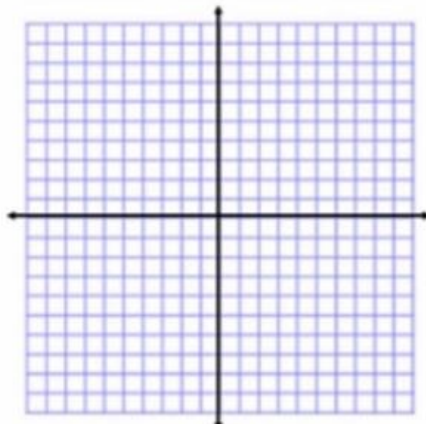
1. $y = x^2 - 6$

2. $y = x^3 + 4$

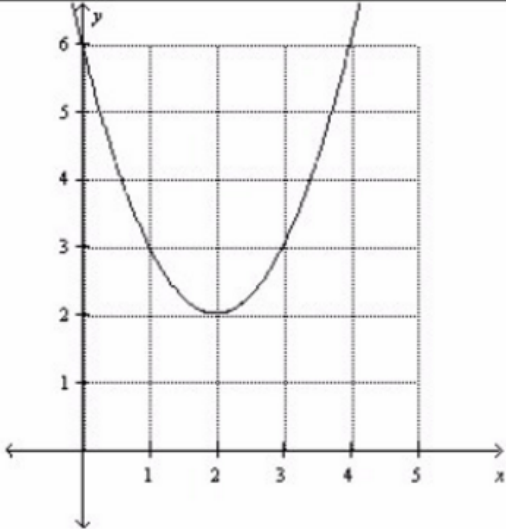
3. $y = \sqrt{x - 2} + 1$

4. $y = 2^x - 3$

Example 1

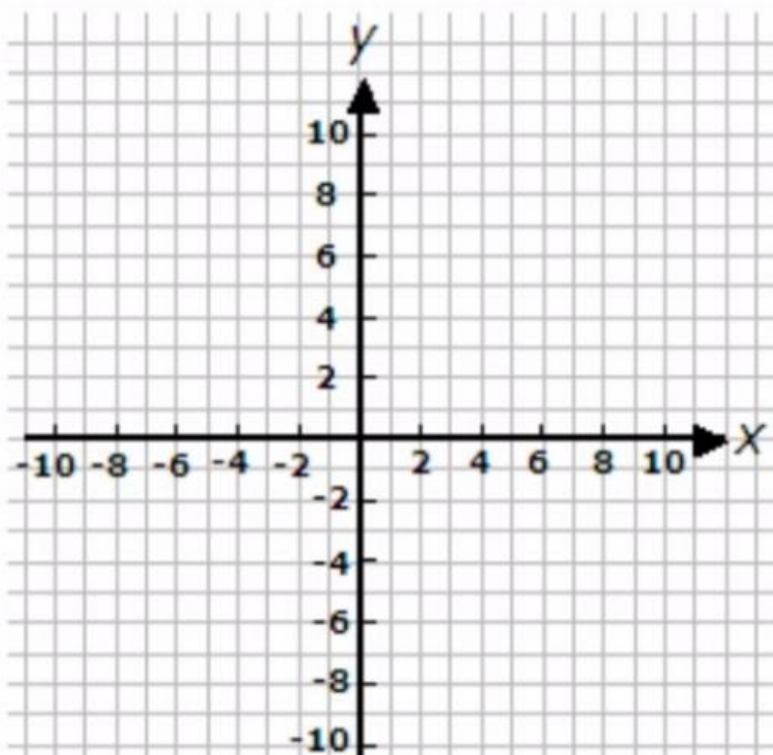
Standard Form: $f(x) = x^2 + 6x + 8$	Vertex Form:	
Axis of symmetry:	Min:	
Vertex:	Max:	
x-intercept(s):	y-intercept:	
Domain:	Range:	
Increasing:	Decreasing:	
End Behavior:		

Example 2

Standard Form:	Vertex Form:	
Axis of symmetry:	Min:	
Vertex:	Max:	
x-intercept(s):	y-intercept:	
Domain:	Range:	
Increasing:	Decreasing:	
End Behavior:		

Example 3

$$f(x) = x^3 + 2x^2 - 3.5x - 5$$



Domain:

Range:

Max:

Min:

Increasing:

Decreasing:

Zeros:

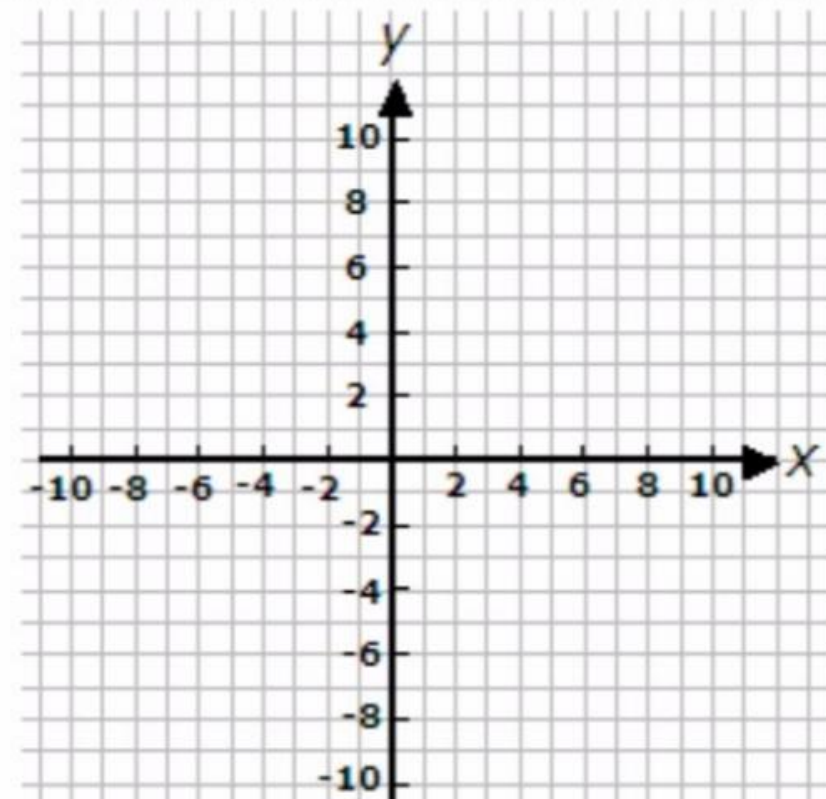
X-intercept(s):

Y-intercept:

End Behavior:

Example 4

$$f(x) = -3x^4 + 5x^3 + 6x^2$$



Domain:

Range:

Max:

Min:

Increasing:

Decreasing:

Zeros:

X-intercept(s):

Y-intercept:

End Behavior:

Absolute Max and Min