Algebra 2 | U3.7 Worksheet
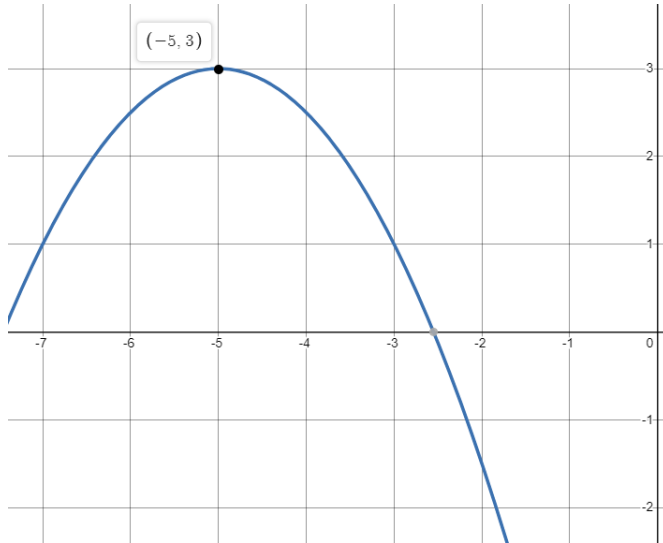
Name: _____ **Hour:** _____

For the following graphs, state the intervals of increasing and decreasing.
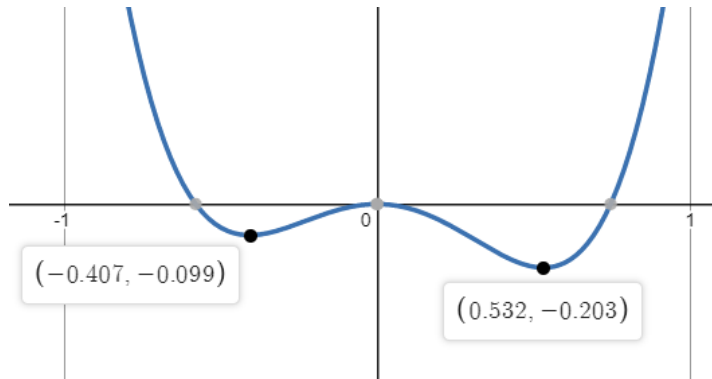
1.

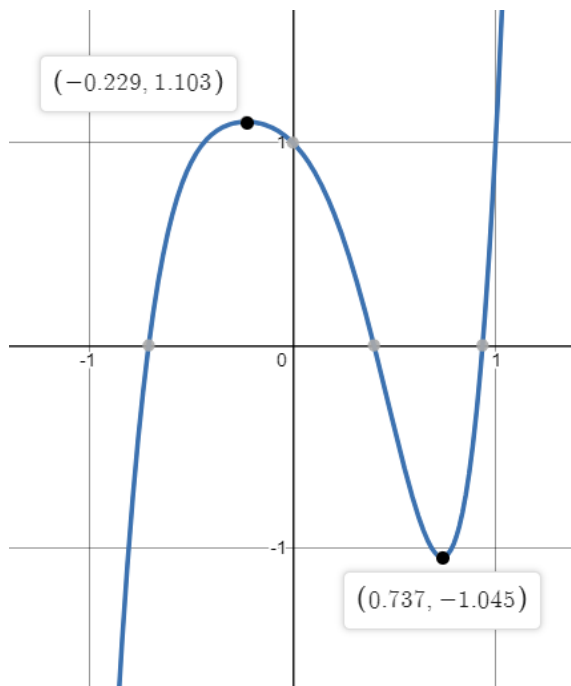$(-5, 3)$

Interval of Increasing:

Interval of Decreasing:

2.

$(-0.407, -0.099)$

$(0.532, -0.203)$

Interval of Increasing:

Interval of Decreasing:
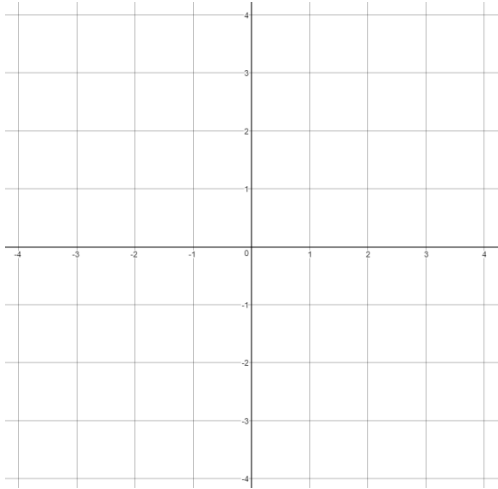
3.

$(-0.229, 1.103)$

$(0.737, -1.045)$

Interval of Increasing:

Interval of Decreasing:

Graph the following functions. Then state the domain/range and intervals of increasing/decreasing of the graph.
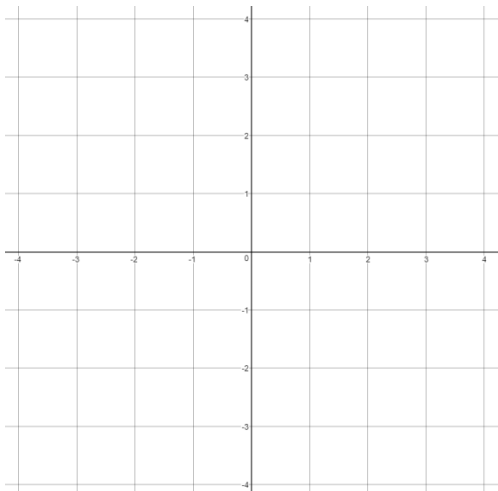
4. $y = 4^{x+3} - 1$

Domain: _____

Range: _____

Increasing: _____

Decreasing: _____

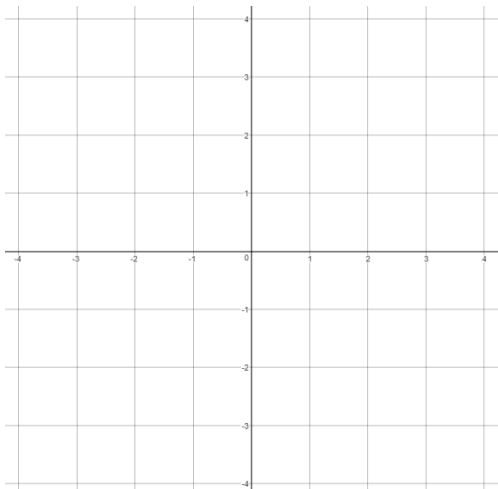5. $y = -(x - 1)^3 + 2$

Domain: _____

Range: _____

Increasing: _____

Decreasing: _____

6. $y = \log_{\frac{1}{3}}(x) + 1$

Domain: _____

Range: _____

Increasing: _____

Decreasing: _____