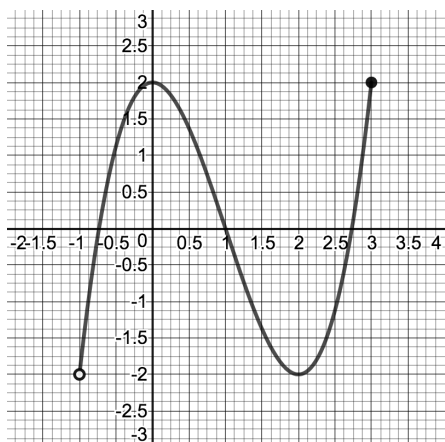


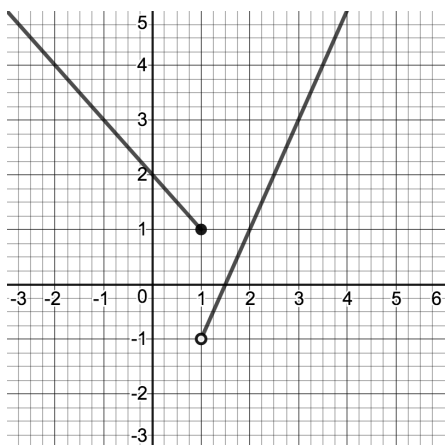
§P.6: Graphs of Functions

- 1.] Use the graph of $y = f(x)$ below to determine the domain and range, intervals of increasing/decreasing, and find the function values using the graph.



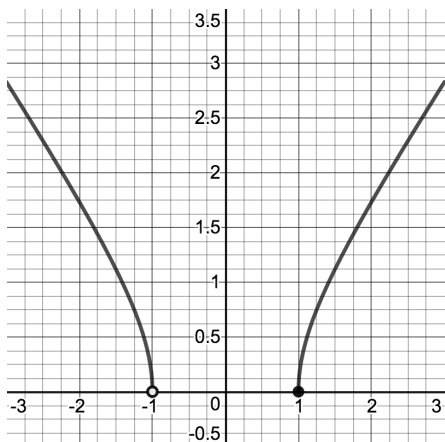
- a.) Domain:
 b.) Range:
 c.) Increasing on:
 d.) Decreasing on:
 e.) $f(-1)$
 f.) $f(1)$
 g.) $f(3)$

- 2.] Use the graph of $y = f(x)$ below to determine the domain and range, intervals of increasing/decreasing, and find the function values using the graph.



- a.) Domain:
 b.) Range:
 c.) Increasing on:
 d.) Decreasing on:
 e.) $f(2)$
 f.) $f(1)$
 g.) $f(3)$

- 3.] Use the graph of $y = f(x)$ below to determine the domain and range, intervals of increasing/decreasing, and find the function values using the graph.



- a.) Domain:
 b.) Range:
 c.) Increasing on:
 d.) Decreasing on:
 e.) $f(-1)$
 f.) $f(0)$
 g.) $f(1)$

4.] Find the zeros of the function $f(x) = 2x^2 - 7x - 30$

5.] Find the zeros of the function $f(x) = \sqrt{2x + 11}$

6.] Find the zeros of the function $f(x) = \frac{2x^2 - 9}{3 - x}$

7.] The function $f(x) = x^3 - 3x^2 - x$ is graphed below. Find the average rate of change of f between $x_1 = -1$ and $x_2 = 2$. Sketch the secant line on the graph.

