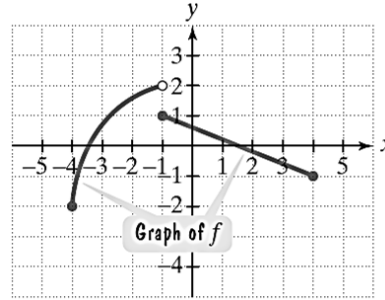


# 2.REV.1 – LESSONS 2.1 & 2.2

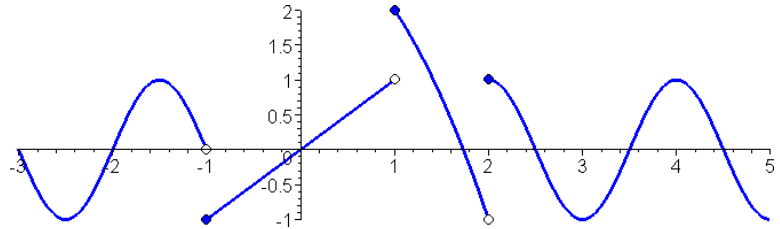
Past due on: \_\_\_\_\_ Period: \_\_\_\_\_

True or false?

- The domain of  $f$  is  $[-4, -1) \cup (-1, 4]$ .
- The range of  $f$  is  $[-2, 2]$ .
- $f(-1) - f(4) = 2$
- $f(0) = 2.1$



- Evaluate  $f(-1)$ .
- Evaluate  $f(1)$ .
- Evaluate  $f(2)$ .
- Solve  $f(x) = 1$  for  $x$ .
- Solve  $f(x) = -1$  for  $x$ .



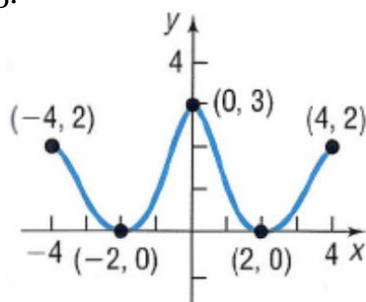
USE WITH PROBLEMS 5 – 9.

Problems 10 – 14: For each function below, evaluate for the given input, solve for the given output, and describe the domain.

	EVALUATE	SOLVE	DOMAIN
10. $f(x) = 5\sqrt{x+6}$	$f(3)$	$f(x) = 20$	
11. $f(x) = \sqrt{6-2x}$	$f(-5)$	$f(x) = 6$	
12. $f(x) = 3x^2 - 75$	$f(-4)$	$f(x) = 0$	
13. $f(x) = x^2 + 8x - 7$	$f(2)$	$f(x) = -22$	
14. $f(x) = \frac{5x+3}{x-6}$	$f(0)$	$f(x) = -10$	

Identify the properties of each function graphed below.

15.



Domain

Range

x-intercept(s)

y-intercept

Increasing interval(s)

Decreasing interval(s)

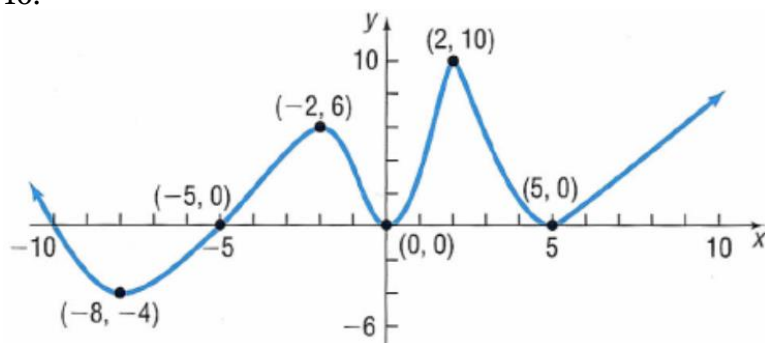
Max value

Location

Min value

Location

16.



Domain

Range

x-intercept(s)

y-intercept

Increasing interval(s)

Decreasing intervals(s)

Maximum value(s)

Location(s)

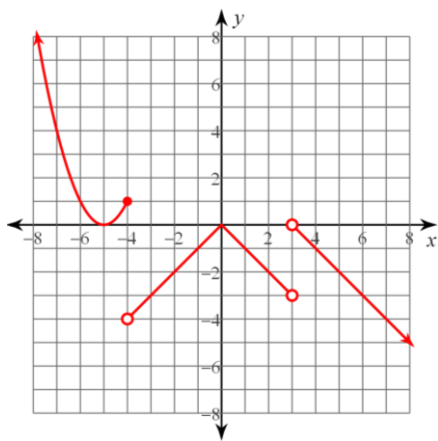
Minimum value(s)

Location(s)

$\lim_{x \rightarrow -\infty} f(x) =$

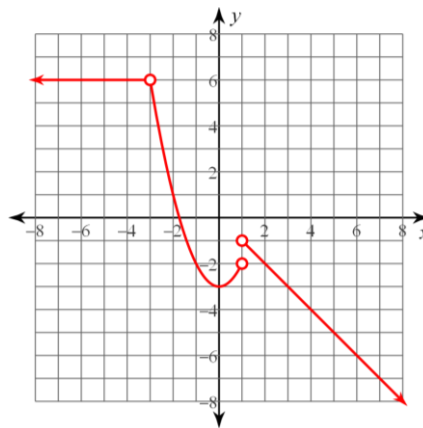
$\lim_{x \rightarrow \infty} f(x) =$

Identify the domain and the range of each function.



Domain:

Range:



Domain:

Range: