Unit 3 Test Review – Feature of Functions   - Answers are posted on my website:
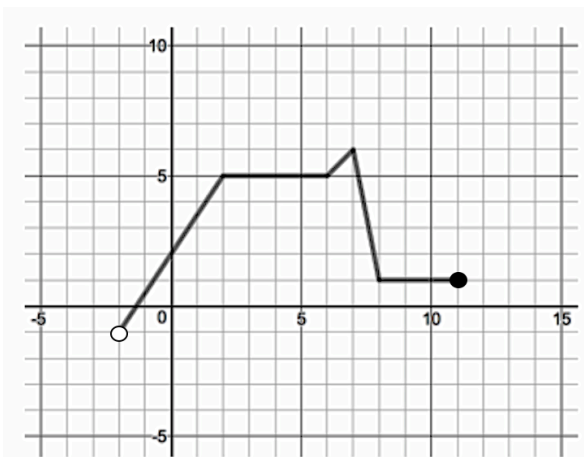
1.

Intervals of Increase:

Intervals of Decrease:

Constant Intervals:

x – intercepts: Domain:
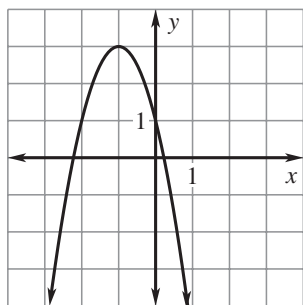
y – intercept:

Maximum: Range:

Minimum:

2.   Intervals of Increase:

Intervals of Decrease:

Constant Intervals:

x – intercepts:

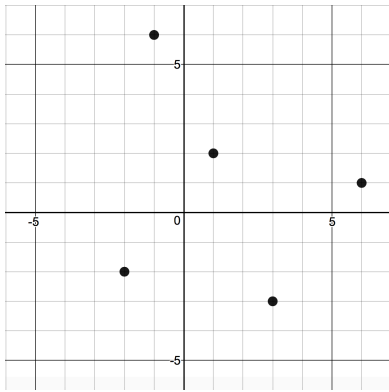y – intercept: Domain:

Maximum:

Minimum: Range:

3.
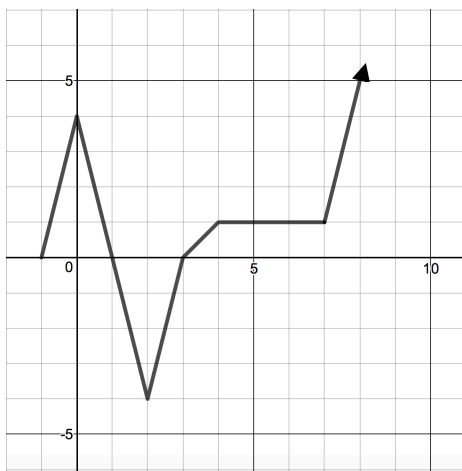
Domain:

Range:

Maximum:

Minimum:

4.

Intervals of Increase:

Intervals of Decrease:

Constant Intervals:

Domain:

x – intercepts:

y – intercept:

Range:

Maximum:

Minimum:

5.   Use the graph for #4 to find the following.

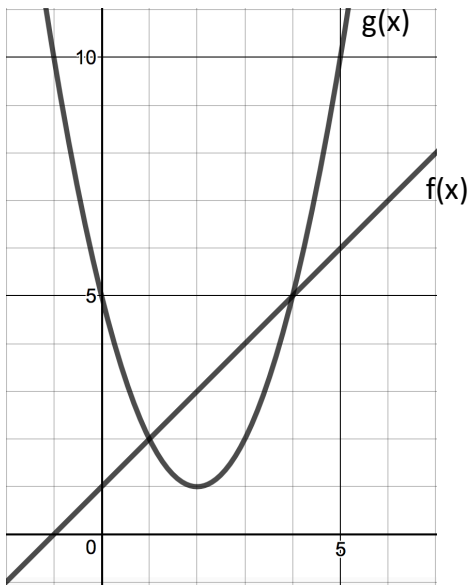a) $f(0) =$ _____

b) $f(6) =$ _____

c) $f(x) = -4, \ x =$ _____

d) $f(x) = 0, \ x =$ _____

6. Use the given functions, determine the values of each of the following and then write as ordered pairs.

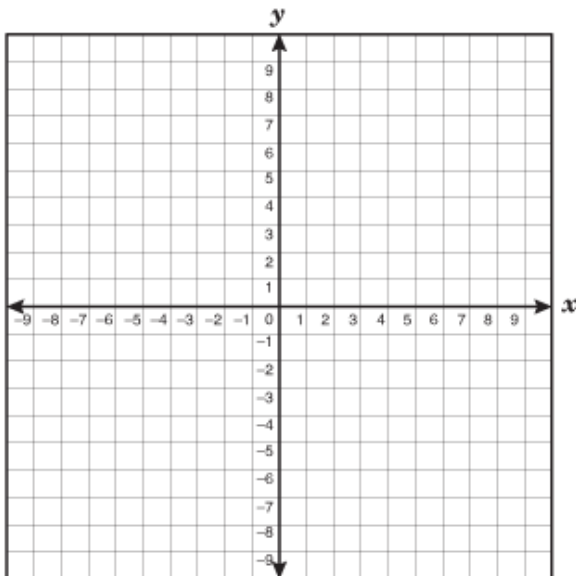$$f(x) = 3x - 2 \text{ and } g(x) = -x + 5$$

a) $f(-5) =$

b) $g(6) =$

c) $f(0) =$

7. Use the given graph to determine the values of each of the following.

a) Find $f(0) =$ _____

b) Find $g(0) =$ _____

c) When $g(x) = 5$, then $x =$ _____

d) Where does $g(x) = f(x)$?
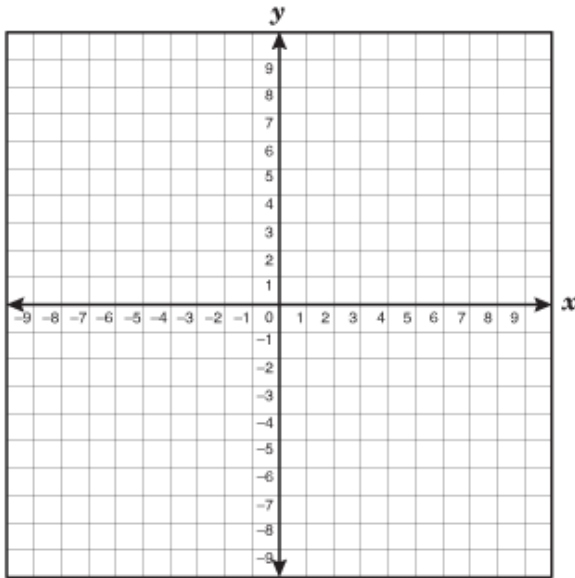
e) On what interval is $f(x) > g(x)$?

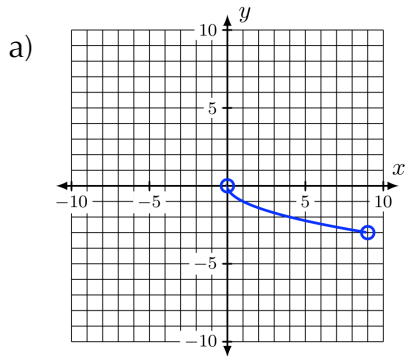8. Draw a graph of a function with the given domain and range.

Domain: [-8, 4]

Range: [-2, 5]

9.   Draw a graph of a function with the following features.
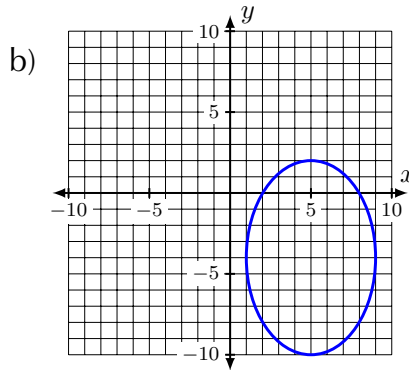

Domain: [–5, 8]

Range: [-4, 6]

Interval of Decrease: (–2, 5)

Maximum: (–2, 6)

Minimum: (5, –4)

10.   Find the domain, range, and determine if it is a function and show where it fails if it is not.

a)

Domain:

Range:

Function?:

b)

Domain:

Range:

Function?:

c)

x	2	4	3	2
y	1	2	3	4

Domain:

Range:

Function?:

d)

x	2	4	3	2
y	4	2	3	4

Domain:

Range:

Function?: