Name:_____ Date:_____

UNIT 6 **LESSON 5**

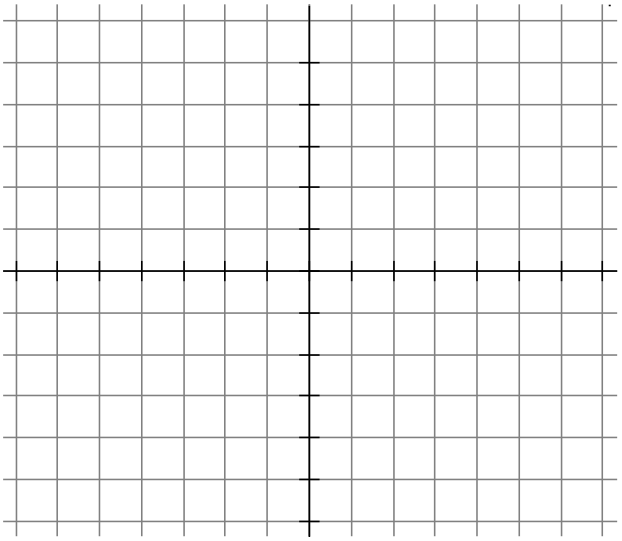
Do Now: Evaluate the following function, if g(x) = x – 1

a. Find g(1). b. Find g(-1). c. Find x if g(x) = 1 d. Find x if g(x) = -1

AIM: How Do We Evaluate Functions Graphically?

1) Graph: g(x) = x – 1

x	y



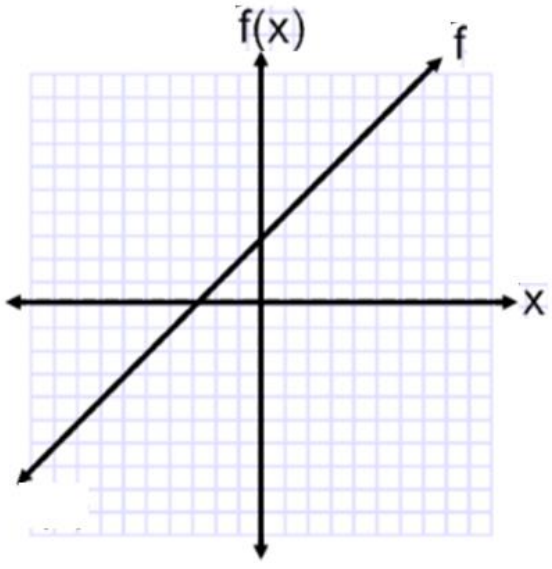
a) Find g(1).	b) Find g(-1).	c) Find g(3).	d) Find x if g(x) = 1.	e) Find x if g(x) = -1.

2) Using the graphs below, evaluate the following:

a. f(7)

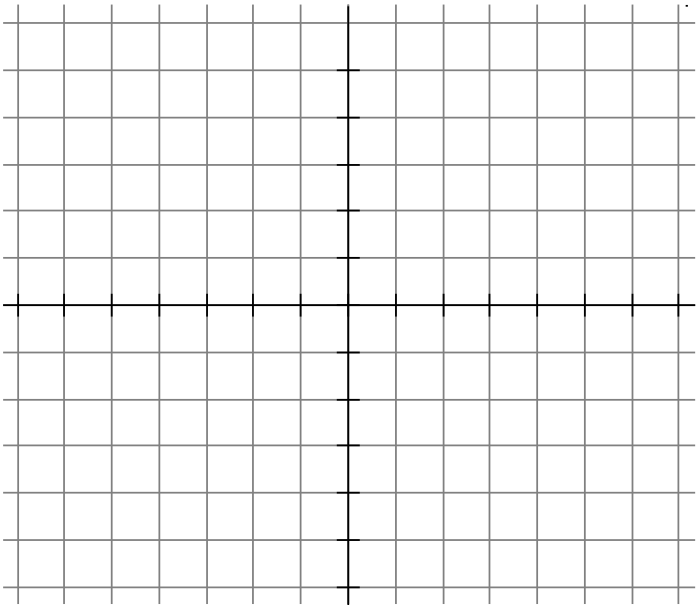
b. f(0)

c. f(x) = 3



3) Graph $f(x) = x^2 + 6x + 5$ $\{-6 \leq x \leq 0\}$

x	y



a) Find f(-6).	b) Find f(-4).	c) Find x if f(x) = -4	d) Find x if f(x) = -3.

4) Using the graphs below, evaluate the following:

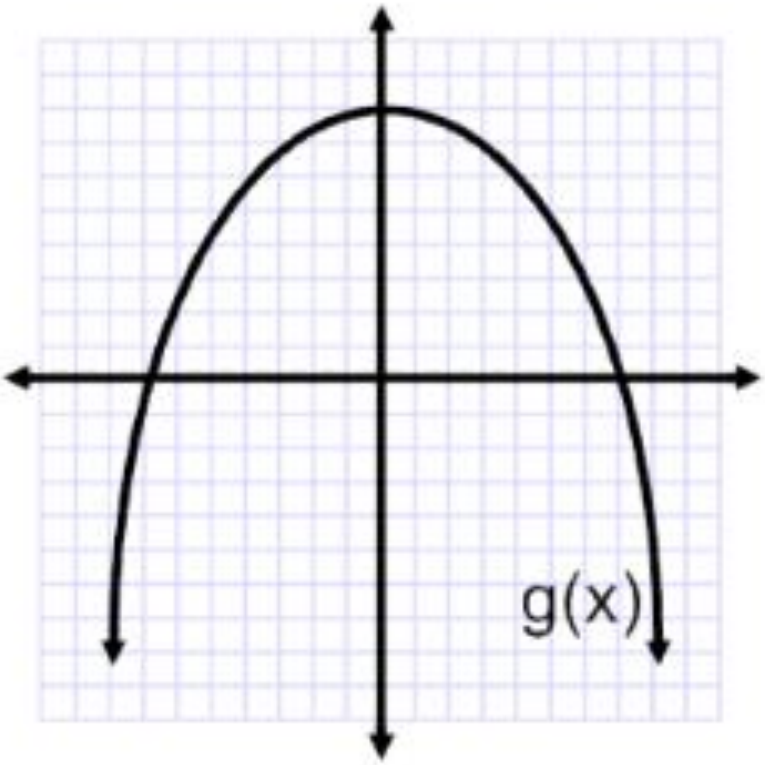
a. g(7)

b. g(-7)

c. g(-5)

d. g(0)

e. g(x) = 0



5) The table shown gives the values for the function h(x):

x	*h(x)*
1	5
2	4
3	3
4	2

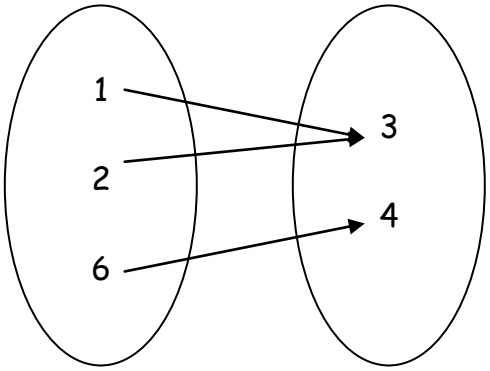
a) Find h(1).

b) Find h(4).

c) Find x if h(x) = 2.

d) Find x if h(x) = 4.

6) Using the diagram at the right:



a) Find f(1).

b) Find f(6).

c) Find x if f(x) = 4

d) State the domain.

e) State the range.

f) Explain why the mapping is a function.

g) Add an arrow to the diagram that would make the mapping not a function.

Name:_____ Date:_____

UNIT 6 **LESSON 5**

HW#____

1. Which of the following is a function? Explain your answer.

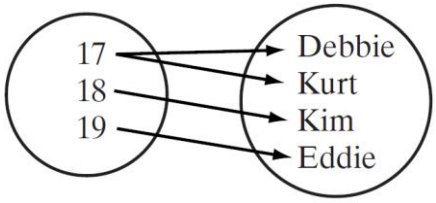
   [A] {4, –6, 0, 5}

   [B] {(4, –6), (0, 5), (0, 4), (5, 0)}

   [C] {(4, –6), (–6, 4), (5, 5)}

   [D] {(4, –6), (–6, 0), (4, 5)}

2. Determine if the following is a function. Explain your answer.



3. Given: The function g(x) = –6x -12

   a) Find g(-3).

   b) Find *x* when *g*(x) = 24.

4. Given this graph of the function f(x):
   Find the following:

   a. *f*(–4) =

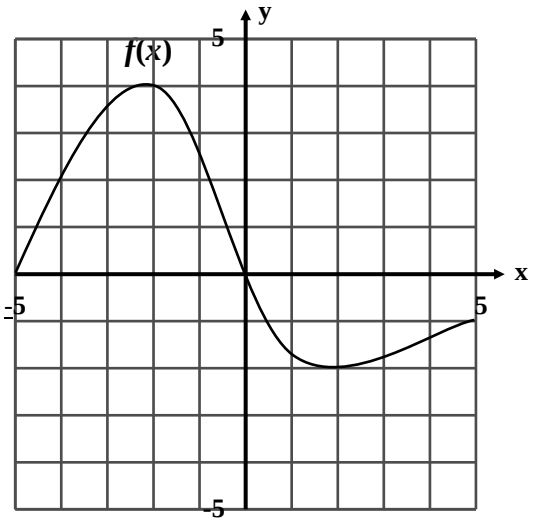
   b. *f*(0) =

   c. *f*(2) =

   d. *f*(-5) =

   e. *x* when *f*(*x*) = -2

   f. *x* when *f*(*x*) = 0



5. Swine flu is attacking Long Island. The function below determines how many people have swine where x = time in days and S = the number of people in thousands.

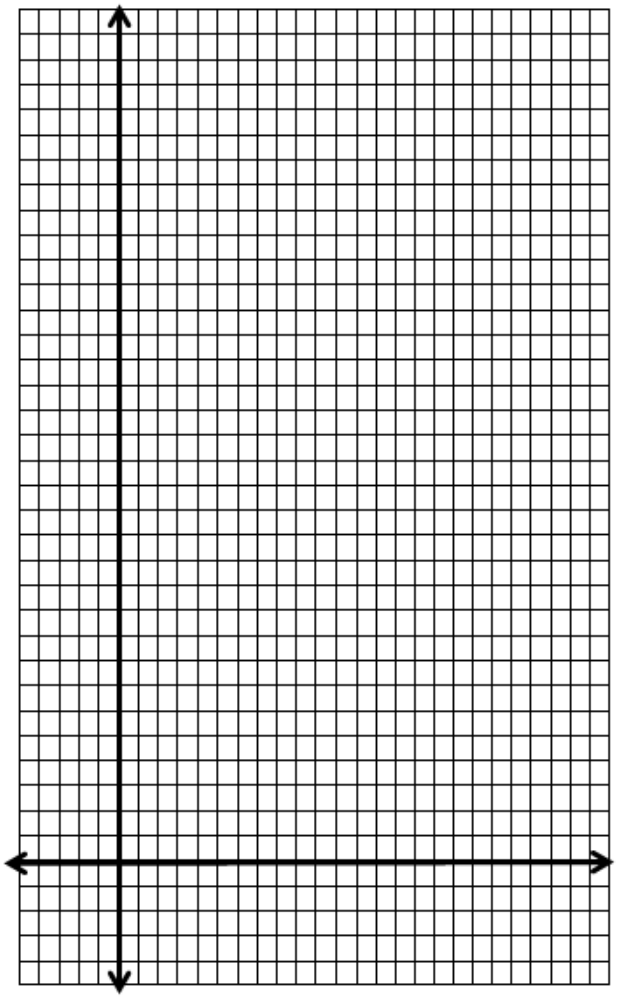
   a) Graph of the function $S(x) = 9x - 4$

   b) Find $S(4)$.

   c) What does $S(4)$ mean?

   d) Find t when $S(x) = 23$

   e) What does $S(x) = 23$ mean?



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