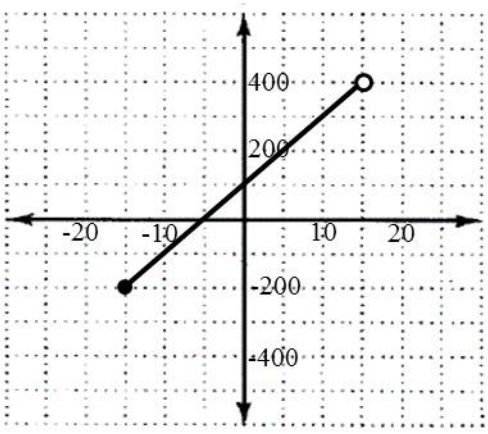
Name: _____ **Date:** _____

Lesson 1 Assessment

1. Let $r(a) = 4 - 5a$. Show all steps. Write each answer using function notation **and** as an ordered pair.
   a) Determine $r(-2)$.
   b) For what value of a is $r(a) = 19$?

2. The graph of $f(x)$ is given below. Use inequality notation.



   a) Give the domain of $f(x)$:

   b) Give the range of $f(x)$:

   c) $f(0) =$ _____

   d) $f(x) = 0$ when $x =$ _____

3. Consider the following table of values. Fill in the blanks below, and identify the corresponding ordered pairs.

x	–2	–1	0	1	2	3	4
***g*(*x*)**	1	4	2	6	5	0	2

g(1) = _____, $g(x) = 1$ when $x =$ _____, $g(x) = 2$ when $x =$ _____

4. The height, h (in feet), of a golf ball is a function of the time, t (in seconds), it has been in flight. A golfer strikes the golf ball with an initial upward velocity of 96 feet per second. The maximum height of the ball is 144 feet. The height of the ball above the ground is given by the function $h(t) = -16t^2 + 96t$.

   a) Use the TABLE feature on your graphing calculator to complete the table below.

t	0	1	2	3	4	5	6
$h(t)$							

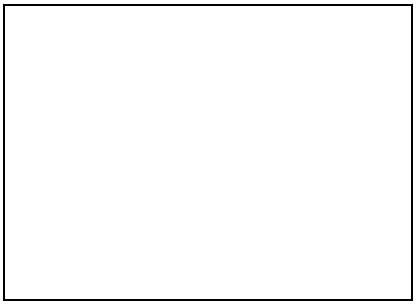
   b) Determine $h(3)$. Write a sentence explaining the meaning of your answer.

   c) For what values of t is $h(t) = 0$? Explain the meaning of your answers.

   d) Determine the practical domain. Use inequality notation and include units.

   e) Determine the practical range. Use inequality notation and include units.

   f) Use your graphing calculator to generate a graph of $h(t)$. Use the practical domain and range to determine a "good" viewing window. In the space below, sketch what you see on your calculator screen, and write down the viewing window you used.



Xmin=_____

Xmax=_____

Ymin=_____

Ymax=_____