Practice – Introduction to Quadratic Functions Day 3 pp 590-605

Name _____ Date _____ Period _____

Tell whether each function is linear, quadratic, or neither.

1. $-3x^2 + x = y - 11$

2.

x	-2	-1	0	1	2
y	-4	0	4	8	12

3. $\{(-10, 15), (-9, 17), (-8, 19), (-7, 21), (-6, 23)\}$

4. $y = -3x + 20$

5.

x	y
-4	8
-2	2
0	0
2	2
4	8

6. A function is described by the equation $f(x) = x^2 - 3$. The replacement set for the independent variable is {-4, -1, 2, 4}. Which of the following is contained in the corresponding set for the dependent variable?

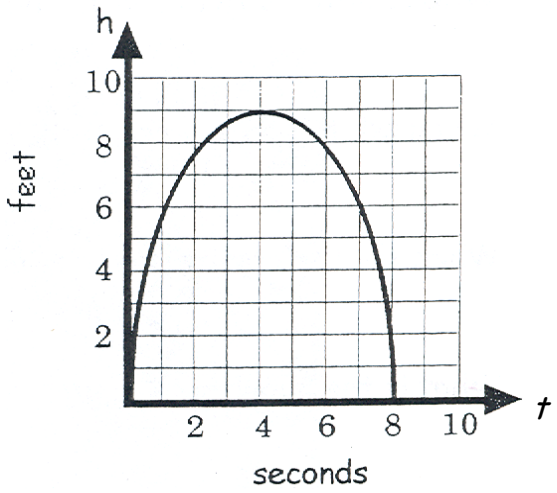
A 6
B 2
C -1
D 13

7. Given the function $f(x) = 3x^2 - 5$, what is the value of $f(-2)$?

8. A quadratic function is given below. What is $f(4)$?

$f(x) = -x^2 + 3x - 2$

9. Mark punted a football. The graph below represents the height, *h* of the football at time, *t*.



A. Find $f(1)$. _____

B. Find $f(7)$. _____

C. After how many seconds was the ball at its maximum height? _____

D. What was the maximum height of the ball? _____

E. Fill in the table with four points that lie on the graph.

x				
y				

F. Calculate the quadratic equation. _____
(Round each part of the equation to the nearest tenth.)

10. Calculate the curve of best fit represented by the data in the table below.
(Round each part of the equation to the nearest tenth.)

x	*y*
-8	-370
-3	-66
-1	-18
4	79
6	-175