3.3 Part B Writing and Evaluating Functions

Name:_____

Hour:_____

Identify each of the following functions as linear or quadratic based on its table. If linear, write an equation that represents that function.

1.

x	−3	−2	−1	0	1	2	3
y	14	10	6	2	−2	−6	−10

4.

x	−3	−2	−1	0	1	2	3
y	−14	−9	−4	1	6	11	16

2.

x	−3	−2	−1	0	1	2	3
y	21	12	5	0	−3	−4	−3

5.

x	−3	−2	−1	0	1	2	3
y	−18	−6	−2	0	2	6	18

3.

x	−3	−2	−1	0	1	2	3
y	−16	−13	−10	−7	−4	−1	2

6.

x	−3	−2	−1	0	1	2	3
y	30	20	12	6	2	0	0

7.

x	-3	-2	-1	0	1	2	3
y	11	9	7	5	3	1	-1

Determine the Domain of the following functions:

10. $g(x) = \dfrac{3}{x+5}$

11. $f(x) = \sqrt{x+5}$

8.

x	-3	-2	-1	0	1	2	3
y	0	5	8	9	8	5	0

12. $f(x) = x^2 + 16$

13. $f(x) = \dfrac{4x}{x+8}$

14. $f(x) = x^2 + 3$

9.

x	-3	-2	-1	0	1	2	3
y	3	0	-1	0	3	8	15

15. $f(x) = \dfrac{3-x}{x-2}$

16. $g(x) = \sqrt{x-7}$

17. $g(x) = \sqrt{x}$