Name: _____ Date: _____ Period: ___

Quadratic Relationships with Tables
Homework

Identify whether the table represents a linear or quadratic relationship. If Quadratic, find the:

a. coordinates of the vertex
b. equation of the axis of symmetry
c. max/min
d. domain and range

Is always ℝ All real numbers

1.

x	y
–4	21
–3	14
–2	9
–1	6
0	5
1	6
2	9

Linear / Quadratic

a. (0, 5)
b. $x = 0$
c. minimum
d. ℝ, $R \geq 5$

2.

x	y
–5	25
–4	11
–3	1
–2	–5
–1	–7
0	–5
1	1

Linear / Quadratic

a. (–1, –7)
b. $x = -1$
c. minimum
d. ℝ, $R \geq -1$

3

x	y
–4	–3
–3	–4
–2	–5
–1	-6
0	-7
1	-8
2	-9

+1, +1, –1, –1, –1

y-int

Linear / Quadratic

a.
b. $y = -x + -7$
c.
d. ℝ, ℝ

4.

x	f(x)
–2	–20
–1	–6
0	4
1	10
2	12
3	10
4	4

+14, +10, +6, +2, –2, –6, –10; –4, –4, –4, –4, –4, –4

Linear / Quadratic

a. (2, 12)
b. $x = 2$
c. maximum
d. ℝ, $R \leq 12$

5.

x	y
–4	–3
-3	-4
-2	-3
-1	0
0	5
1	12
2	21

+1, +1, +1, +1, +1, +1; +2, +2, +2, +2, +2

Linear / Quadratic

a. (–3, –4)
b. $x = -3$
c. minimum
d. ℝ, $R \geq -3$

6.

x	f(x)
0	9
1	12
2	13
3	12
4	9
5	4
6	–3

Linear / Quadratic

a. (2, 13)
b. $x = 2$
c. maximum
d. ℝ, $R \leq 13$