Comparing Linear, Exponential, and Quadratic Equations/Expressions

- Based on the difference in x-value & y-values, identify the table as linear, exponential, quadratic, or neither.
- If you identify the table as linear or exponential, write an equation.

1.

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

2.

x	−3	−2	−1	0	1	2	3
y	$\frac{1}{2}$	1	2	4	8	16	32

3.

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

4.

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

5.

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

6.

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

7.

x	−3	−2	−1	0	1	2	3
y	4	8	16	32	64	128	256

8.

x	−3	−2	−1	0	1	2	3
y	$\frac{1}{27}$	$\frac{1}{9}$	$\frac{1}{3}$	1	3	9	27

9.

x	−3	−2	−1	0	1	2	3
y	30	20	12	6	2	0	0

10.

x	−3	−2	−1	0	1	2	3
y	11	9	7	5	3	1	−1

11.

x	−3	−2	−1	0	1	2	3
y	$\frac{1}{9}$	$\frac{1}{3}$	1	3	9	27	81

12.

x	−3	−2	−1	0	1	2	3
y	−27	−9	−3	0	3	9	27

13.

x	−3	−2	−1	0	1	2	3
y	0	5	8	9	8	5	0

14.

x	−3	−2	−1	0	1	2	3
y	3	0	−1	0	3	8	15

15.

x	−3	−2	−1	0	1	2	3
y	1	0	−1	−2	−1	0	1

16.

x	−3	−2	−1	0	1	2	3
y	$\frac{9}{8}$	$\frac{9}{4}$	$\frac{9}{2}$	9	18	36	72