

Recognizing Relationships in Data Tables

For each of the tables below, determine what type of relationship is represented (linear, exponential, or unknown). Write an equation if linear or exponential, if unknown provide evidence why it is neither linear nor exponential. Show that your equation is correct by checking with **at least two** data points from the table.

Be efficient! Using algebra can be quicker than counting back to 0 to find the y- intercept.

1.

x	y
0	1.2
1	3.6
2	10.8
3	32.4

2.

x	y
3	100
4	75
5	60
6	50

3.

x	y
17	-17
18	-19
19	-23
20	-27

4.

x	y
2	24.5
3	171.5
4	1200.5
5	8403.5

5.

x	y
15	28,697,814
16	86,093,442
17	258,280,326
18	774,840,978

6.

x	y
20	25
26	27
35	30
38	31

7.

x	y
20	63,250
30	50,750
40	38,250
60	13,250

8.

x	y
20	10,485.76
21	20,971.52
22	41,943.04
23	83,886.08

9.

x	y
4	192
6	3072
8	49,152
10	786,432

10.

x	y
20	4.0
22	4.8
24	5.6
30	8.0

11.

x	y
-4	5
-2	10
2	-10
4	-5

12.

x	y
20	5
27	7
41	11
48	13

13.

x	y
0	3
1	4
2	11
3	30

14.

x	y
3	12.8
5	204.8
7	3,276.8
9	52,428.8

15.

x	y
2	4.8
5	38.4
8	307.2
11	2,457.6