

For each table, find the function that the table represents.

a)

x	y
-1	0.5
0	1
1	2
2	4
3	8

It looks like an exponential function.

$$y = 2^x$$

It checks out.

b)

x	y
0	-4
1	-1
2	2
3	5
4	8

The y-values increase by 3 every time, so it is a line.

$$y = 3x - 4$$

It checks out.

c)

x	y
5	8
6	5
7	4
8	5
9	8

It looks like a parabola with vertex (7, 4) \Rightarrow

$$y = (x - 7)^2 + 4 = x^2 - 14x + 49 + 4 = x^2 - 14x + 53$$

It checks out.

d)

x	y
0.5	-1
1	0
2	1
4	2
8	3

x & y are switched from table (a) \Rightarrow it is a logarithm.

$$y = \log_2 x$$

It checks out.