

LNF1 Linear vs. Nonlinear Functions

Determine whether each table represents a linear or nonlinear function. **Explain.**

x	1	2	3	4
y	1	4	9	16

x	3	6	9	12
y	12	10	8	6

x	0	1	2	3
y	1	3	6	10

x	0	3	6	9
y	-3	9	21	33

x	4	8	12	16
y	3	0	-3	-6

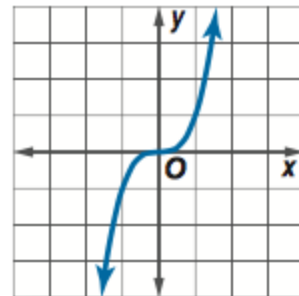
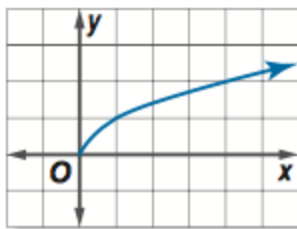
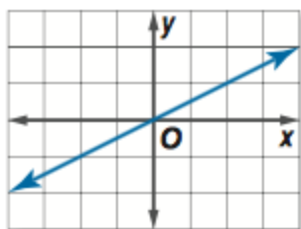
x	2	4	6	8
y	10	12	16	24

x	1	3	5	7
y	-2	-18	-50	-98

x	0	2	4	6
y	0	2	8	18

x	0	5	10	15
y	20	16	12	8

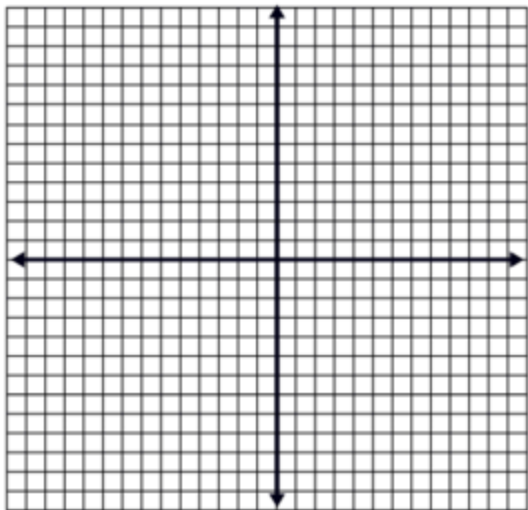
Determine whether each graph represents a linear or nonlinear function. **Explain.**



Determine whether each equation represents a linear or nonlinear function. Prove your claim by graphing the equation using a table of values.

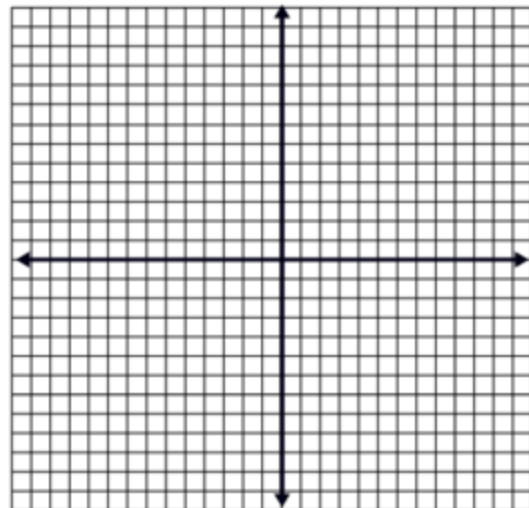
$$y = -2x + 5$$

Use -2, -1, 0, 1, 2 for x values.



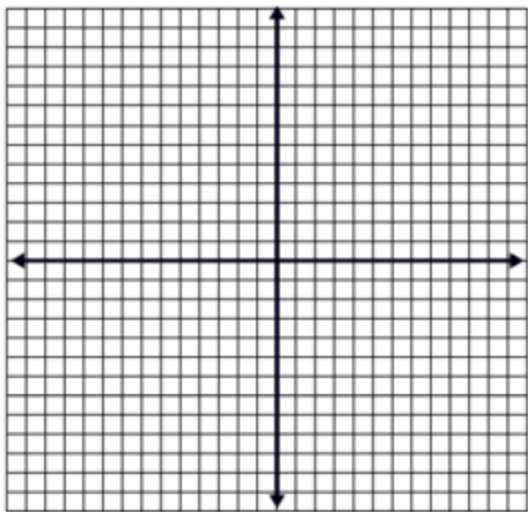
$$y = x^2 + 2$$

Use -2, -1, 0, 1, 2 for x values.



$$y = \sqrt{x} + 1$$

Use 1, 4, 9, 16, 25 for x values.



$$y = \frac{4}{x}$$

Use -4, -2, -1, 0, 1, 2, 4 for x values.

