

Linear or Nonlinear Functions

A) Determine whether each function table is linear or nonlinear.

1)

x	-16	-3	11	15
$f(x)$	-24	-11	3	7

2)

x	1	4	6	7
$f(x)$	-7	23	63	89

3)

x	-7	0	9	12
$f(x)$	-10	-3	6	9

4)

x	-9	-6	-1	14
$f(x)$	-7	-7	2	16

5)

x	-3	2	13	17
$f(x)$	-21	-26	59	41

6)

x	-14	-10	-5	-4
$f(x)$	-11	-7	-2	-1

7)

x	-18	-14	-12	0
$f(x)$	2	4	5	11

8)

x	-16	3	8	21
$f(x)$	25	-11	44	51

B) 1) Which of the following tables represents a linear function?

a)

x	-2	0	6	9
$f(x)$	0	-4	45	96

b)

x	3	7	11	14
$f(x)$	17	37	57	72

c)

x	-7	-6	1	3
$f(x)$	40	16	0	7

2) Which of the following tables represents a nonlinear function?

a)

x	1	3	9	10
$f(x)$	-3	-1	5	6

b)

x	-10	2	15	20
$f(x)$	-51	9	74	99

c)

x	-8	-3	4	6
$f(x)$	65	2	17	37