

# 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

**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

**linear**2) 

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

**nonlinear**3) 

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

**linear**4) 

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

**nonlinear**5) 

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

**nonlinear**6) 

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

**linear**7) 

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

**linear**8) 

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

**nonlinear**

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

a) 

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

**b)**b) 

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

c)

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)

b) 

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

**c)**c) 

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