Comparing Functions in Different Formats - Independent Practice Worksheet

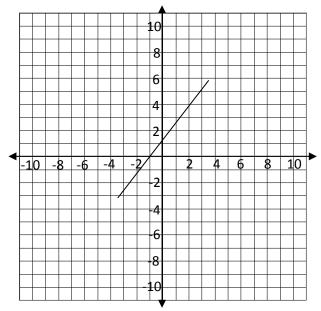
Complete all the problems.

1) Two functions are represented in different ways.

Function 1: The input-output table shows the x- and y-values of a quadratic function.

Х	У
1	1
3	9
4	16
5	25
6	36
7	49
8	64

Function 2: The graph of a linear function is shown.

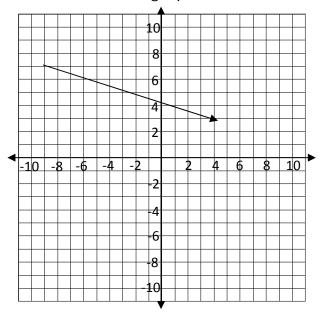


From the two functions, which function grows faster for large positive values of x?

Function 1: The input-output table shows the x- and y-values of a quadratic function.

Х	У
0	0
1	2
2	4
4	16
6	36
7	49
10	100

Function 2: The graph of a linear function is shown.

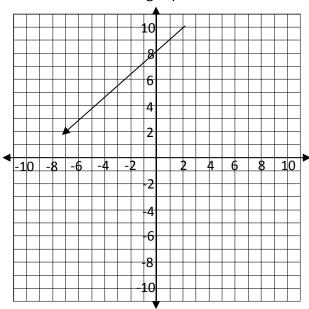


Which of the two functions show no growth at all?

Function 1: The input-output table shows the x- and y-values of a quadratic function.

У
8
27
64
125
216
343
512

Function 2: The graph of a linear function is shown.

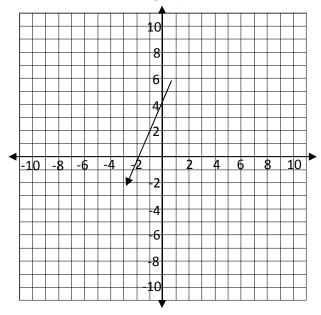


Which of the two functions grows at a faster rate?

Function 1: The input-output table shows the x- and y-values of a quadratic function.

Х	у
2	7
4	9
5	10
6	11
7	12
8	13
9	14

Function 2: The graph of a linear function is shown.

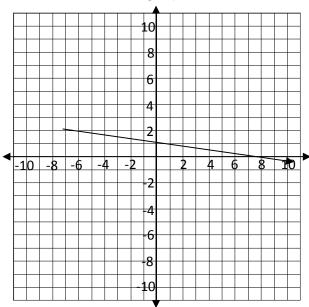


Which of the two functions grow at a slower rate.

Function 1: The input-output table shows the x- and y-values of a quadratic function.

Х	у
-1	1
0	0
1	1
2	4
3	9
4	16
5	25

Function 2: The graph of a linear function is shown.

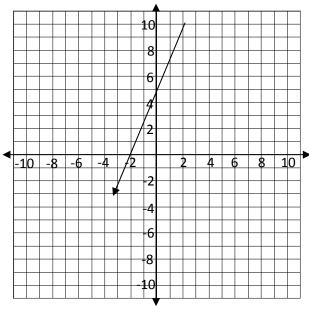


Which of the two functions show a decline in growth?

Function 1: The input-output table shows the x- and y-values of a quadratic function.

Х	у
4	8
5	10
6	12
7	14
8	16
9	18
10	20

Function 2: The graph of a linear function is shown.



From the two functions, which function grows faster for large positive values of x?

For problems 7 – 8 indicate which of the two functions you would expect to grow at a faster rate. Circle the function name.

Function X is quadratic. Function Z is linear. Function Q is exponential.

- 7) Function Z or Function X.
- 8) Function Q or Function Z.
- 9) Two functions are represented in different ways. Which function grows at a faster rate?

Function 1:

Х	У
5	25
6	36
7	49
8	64
9	81
10	100
11	121

Function 2:

