

Lesson 11.7: Linear and Nonlinear Functions

Targets

1. I can determine from a table whether the function is linear or nonlinear.
2. I can interpret graphs of linear and nonlinear functions.

Recognize Linear Functions

First attempt this problem on your own. Then watch the video and copy his notes.

- *Deirdre is working with a functions that contains the following points:*
- *Is this function linear or non-linear?*

x	y
1	11
2	14
3	19
4	26
5	35

Linear and Nonlinear Functions (example 3)

First attempt this problem on your own. Then watch the video and copy his notes.

- *Fill in the missing value to make the table represent a linear equation.*

Your attempt:

x	y
1	$\frac{3}{2}$
2	3
3	$\frac{9}{2}$
8	<input type="text"/>

Video Notes:

x	y
1	$\frac{3}{2}$
2	3
3	$\frac{9}{2}$
8	<input type="text"/>

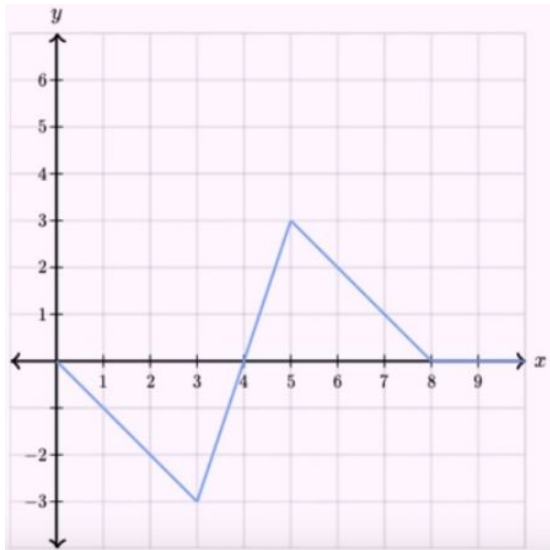
Khan Activity: Linear and Nonlinear Functions

Complete this activity on Khan.

Interpreting a Graph Exercise Example

First attempt this problem on your own. Then watch the video and copy his notes.

- *The illustration below shows the graph of y as a function of x .*



- *Complete the following sentences based on the graph of the function.*
 - *Initially, as x increases, y _____.*
 - *The slope of the graph is equal to _____ for all x between $x = 0$ and $x = 3$.*
 - *Starting at $x = 3$, y _____ as x increases.*
 - *The slope of the graph is equal to _____ for x between $x = 3$ and $x = 5$.*
 - *For x between $x = 0$ and $x = 4$, y _____ 0 .*
 - *For x between $x = 4$ and $x = 8$, y _____ 0 .*

Khan Activity: Interpreting Graphs of Linear and Nonlinear Functions

Complete this activity on Khan.

Exit Ticket

1. Have all your notes filled out above.
2. Complete the following Khan Academy Activities:
 - a. Linear and Nonlinear Functions
 - b. Interpreting Graphs of Linear and Nonlinear Functions