

Functions and Interpreting Graphs

Functions: Any relation in which the independent variable is always unique.
This means that the x -values are always different in a table of values or a list of ordered pairs.

Domain: A list of all of the x -values

Range: A list of all of the y -values

Examples

1. What is the domain and range of the relation shown in the table provided?
Determine if the relation is a function.

x	y
-2	-6
0	-3
2	1
4	5

Domain: $\{-2, 0, 2, 4\}$

Range: $\{-6, -3, 1, 5\}$

Function

\hookrightarrow x 's are all different

2. Determine which set of ordered pairs represent a function.

A. $\{(3, 5), (4, 6), (5, 5), (8, 6)\}$

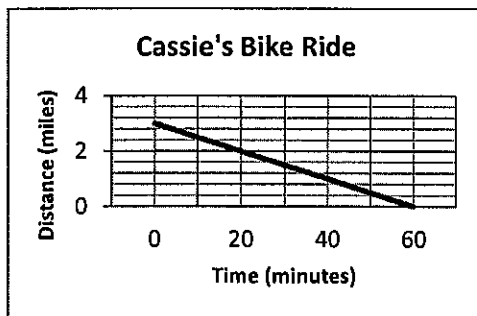
function

B. $\{(3, 8), (3, 6), (5, 4), (10, 2)\}$

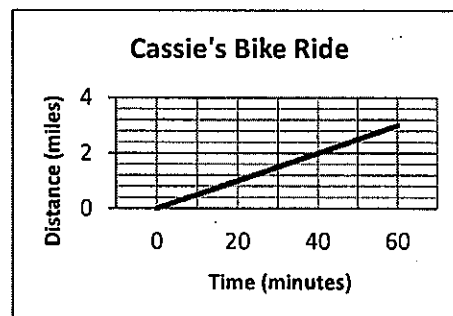
Not a function

3. Cassie rode her bike to the corner of the street as fast as she could at a constant pace. She then turned around and rode her bike back home at a slower relaxed pace. Assume that the street is a straight road. Which graph best represents Cassie's distance from her home over time?

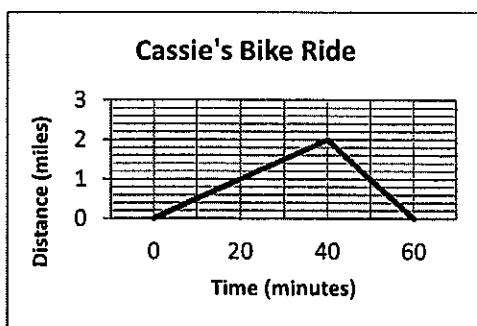
A.



B.



C.



D.

