

Name:

ANSWERS!

Class:



Communication



Successful Partnership



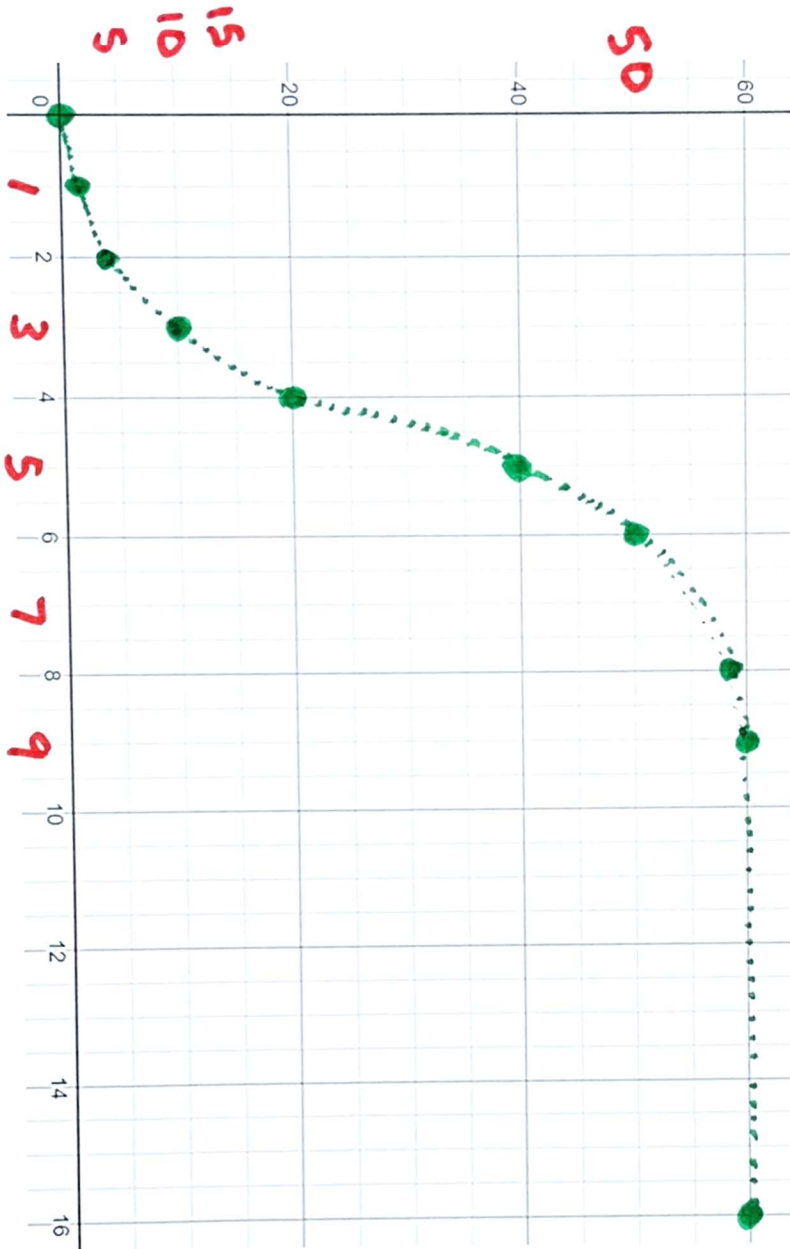
Encouragement



Solving Problem Together



Collaboration



You are sledding down a steep hill onto a soccer field.

The table to the right shows data about your total distance moved.

Make a graph of the story, then answer the questions that follow.

Seconds (x)	Distanced traveled in yards (y)
0	0
1	1
2	4
3	10
4	20
5	40
6	50
7	56
8	59
9	60
16	60

Question 01

Does the graph show a function? Explain how do you know (using "input" and "output").

Yes! The graph shows a function. Each "input" of "x" value has only one "output" of "y" value. This makes sense because at one given time (x value) you can only be at one distance (y value) down the hill.

Question 02

Is the graph linear or nonlinear? Explain how do you know (using "rate of change").

The graph is nonlinear. There is not a constant rate of change. You are not moving at the same speed throughout the ride.

Question 03

When are you moving the fastest? Explain how do you know (using "rate of change").

You are moving the fastest between 4 and 5 seconds. You move 20 yards per second at this interval. It is the greatest rate of change on the graph.

Question 04

Describe what is happening from 9 seconds to 16 seconds in the story.

You are stopped at the bottom of the hill, catching your breathe!

