

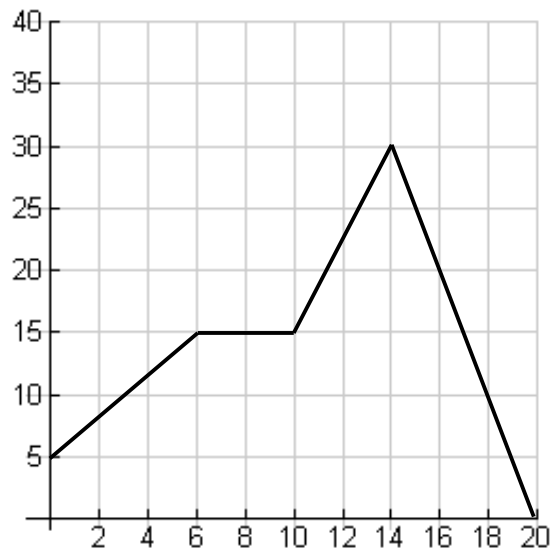
TASK 2.7.2: AND THE STORY CHANGES**Solutions**

Participants' results will vary in both exercises. Key concepts in "And the Story Changes" include:

- Labeling the axes
- The y -intercept and x -intercept remain the same, however the range changes from $0 - 30$ to $0 - 15$.
- There are 4 key sections in each graph. Each section should correspond to a portion of the story; i.e. what changes at each section?
- The slope of the first section of the graph changes from $\frac{5}{3}$ to $\frac{5}{6}$ (half as much). For example, this could represent a faster speed in the first story.
- The section represents a constant y values from $x = 6$ to $x = 10$ in the first graph and from $x = 6$ to $x = 12$ in the second graph. For example, this might represent a segment for resting during a trip that lasts longer in the second story than in the first.
- The third section of the graph changes from a rate of $\frac{15}{4}$ to a rate of $\frac{5}{4}$. This may represent, for example, a faster increase in profit in the first story.
- The final section of the graph changes from a rate of $\frac{5}{1}$ to a rate of $\frac{15}{4}$. Note that this section begins at $x = 14$ in the first graph and $x = 16$ in the second graph.

Math notes

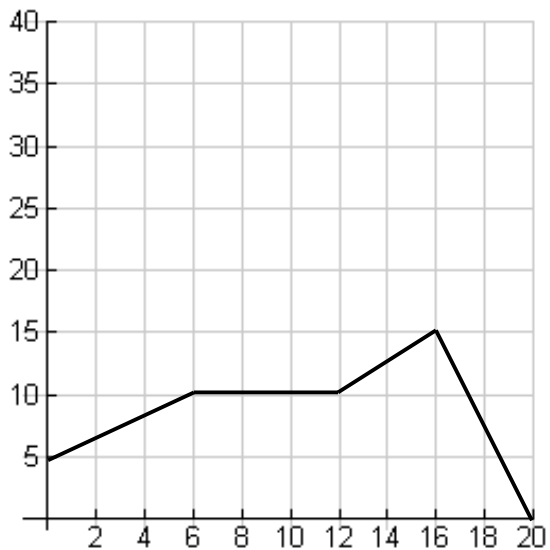
In tasks 2.7.2 and 2.7.3 look for indicators of an accurate understanding of the connections between representations of functions. Other concepts include domain and range, continuous vs. discrete graphs, linear graphs vs. linear sections of graphs.

TASK 2.7.2: AND THE STORY CHANGES

1. Above is a complete graph of a situation. Write a possible story that can be represented by the graph. Be sure to label the axes and include the y -intercept, slopes, and x -intercepts in your story.

Algebra I: Strand 2. Linear Functions; Topic 7. Connect and Change; Task 2.7.2

2. The graph has changed! Look at the new complete graph and compare it to the graph on the first page. How has the graph changed?



Use the same story you wrote for the first graph. Make changes in that story to match the changes that occurred on the graph. Record your changed story below.

Did the range and/or the domain of the situation change? How did that affect your story?