

Graphs & Stories

Today's Learning Targets:

8.2 I can write a story for a graph.

8.3 I can create a graph from a story.

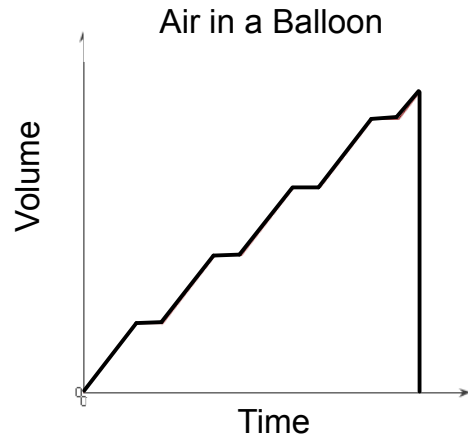
Horizontal Lines

Curved Lines are

The diagram illustrates three types of lines on a coordinate plane. On the left, under the heading "Horizontal Lines", there are three red horizontal lines of varying lengths. On the right, under the heading "Curved Lines are", there are two black curved lines above a horizontal line. Below this horizontal line is a red double-headed arrow. A green arrow points from the bottom-left towards the red arrow, and a blue arrow points from the bottom-right towards the red arrow. At the bottom, the text "Lines going up or down" is centered between two sets of four green horizontal lines, each set enclosed in double quotes.

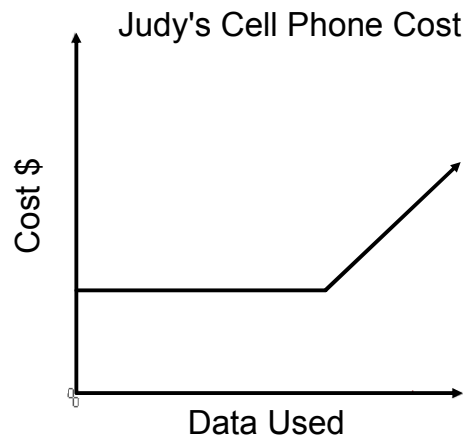
Lines going up or down

What story could we write about this graph?



Story: _____

What story could we write about this graph?



Story: _____

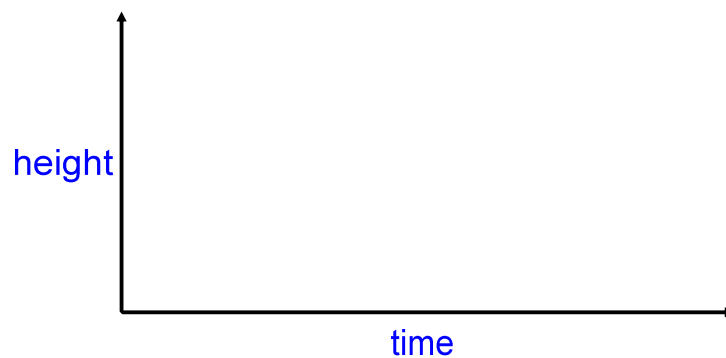
Draw a sketch for the situation.

- A bus accelerates from a stop.
- It drives at a constant speed .
- The bus approaches its next stop.
- It loads people.
- The bus then accelerates away again.



Draw a sketch for the situation.

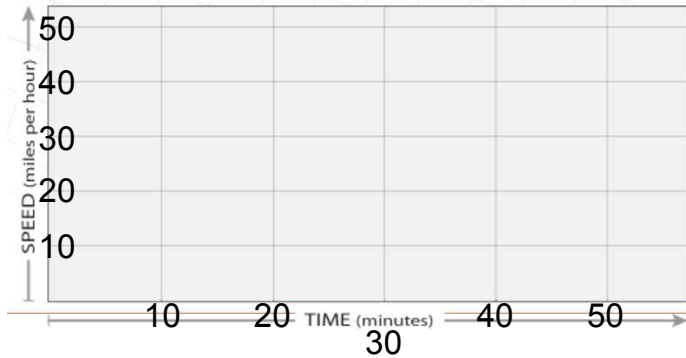
You swing back & forth on a playground swing.



Unit 8 - 8.2 & 8.3

Read the following story. Then sketch a graph that tells the same story. Assume the car will need a very short time to speed up and slow down.

My dad drove me to school this morning. We drove for 10 minutes at about 30 mph. We then slowed to half that speed for the next 5 minutes before stopping at a stoplight for 2 minutes. We got on the highway and drove at 50 mph for 20 minutes. We got off the highway and stopped at a stop sign for a minute. We drove at 20 mph for another 10 minutes, then turned into the school's driveway and stopped.



Story Actions:

55 mph for one hour

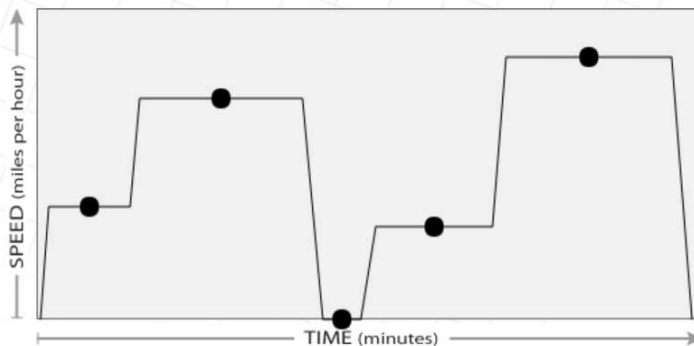
25 mph for 45 minutes

30 mph for 30 minutes

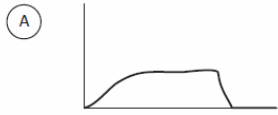
65 mph for one hour

stopped for a snack

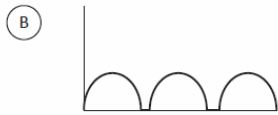
My family went on a day trip to the beach. We left at 8 a.m. and drove _____, until we reached the highway. We drove _____, then _____. When we got back onto the highway, construction merged traffic into one lane, and we averaged about _____. Once the traffic cleared, we sped up to _____, until we reached the beach at noon.



Unit 8 - 8.2 & 8.3



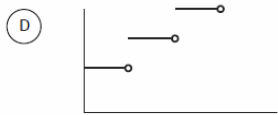
1 A car leaves a rest stop only to be stuck in stand-still traffic a few miles down the road



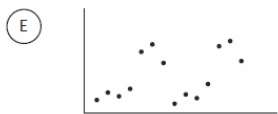
2 The daily profit from a movie theater over a two-week period



3 The position of a high school classroom door from 30 min before school starts to the end of 3rd period



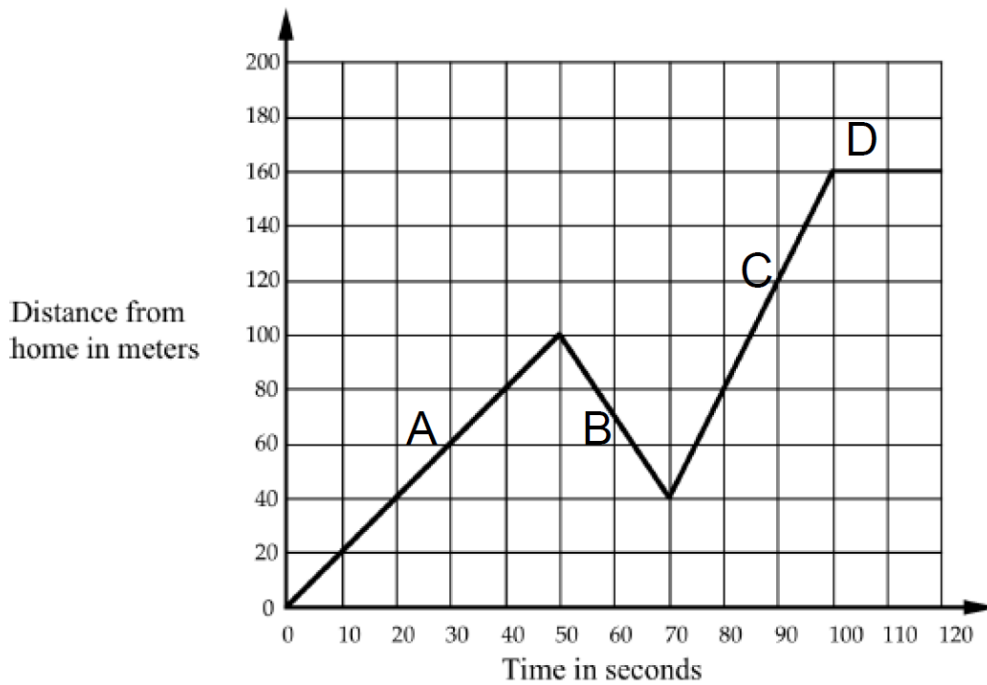
4 Membership at a gym costs \$60 per month in addition to an initial payment of \$30



5 A frog's distance from the ground as he is jumping

A - ___ B - ___ C - ___ D - ___ E - ___

Write a Story to Match the Graph



Unit 8 - 8.2 & 8.3

Draw a sketch that represents the situation.

A golden retriever puppy was chasing a ball and bringing it back to its owner. On one particular throw, the puppy chased the ball, brought it half way back, and then sat down and stared at a frog before finally picking up the ball and bringing it slowly back to the master. The puppy always sits by the owner until the ball is thrown.

