5-1 Relating Graphs to Events

Check Skills You'll Need GO for Help Review page 24

Use the graph at the right.

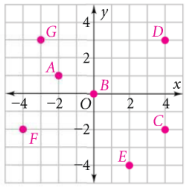
Name the point with the given coordinates.

1. $(4, -2)$ **2.** $(4, 3)$

3. $(2, -4)$ **4.** $(-2, 1)$

Name the coordinates of each given point.

5. B **6.** F **7.** G

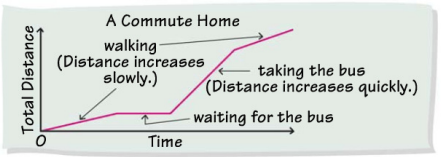


Nov 9-9:22 AM

1 EXAMPLE Interpreting Graphs

Commute One student walks and takes a bus to get from school to home each day. The graph at the right shows the student's commute by relating the time the student spends commuting and the distance he travels.

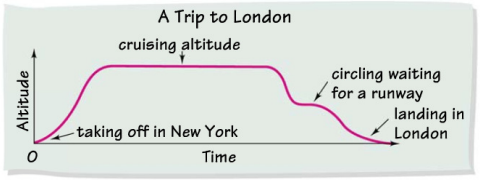
Describe what the graph shows by labeling each part.



Nov 9-9:23 AM

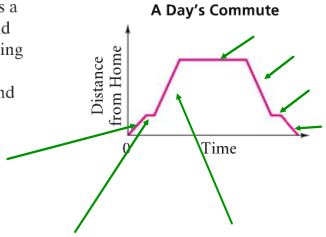
2 EXAMPLE Sketching a Graph

Travel A plane is flying from New York to London. Sketch a graph of the plane's altitude during the flight. Label each section.



Nov 9-9:25 AM

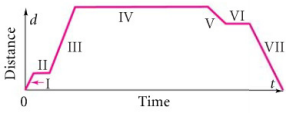
1 The graph at the right shows a trip from home to school and back. The trip involves walking and getting a ride from a neighbor. Copy the graph and label each section.



Nov 9-9:23 AM

Try:

The graph at the right shows the distance Molly was from home throughout Tuesday. She spent about six hours at school, one hour at a friend's house, and about 30 minutes waiting for a bus. She also walked and rode the bus part of the day. Use the graph for Exercises 23–24.



23. What section most likely represents walking to her friend's house?

A. I **B.** II **C.** IV **D.** V

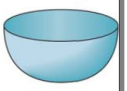
24. What section most likely represents spending time at a friend's house?

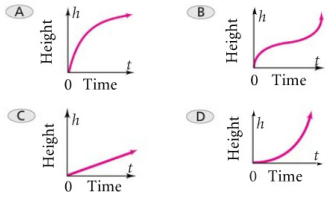
F. II **G.** IV **H.** VI **J.** VII

Nov 9-10:08 AM

3 EXAMPLE Relating Graphs to Situations

Multiple Choice Suppose you pour water into the container at a steady rate. Which graph shows the change in the height of the liquid in the container over time?

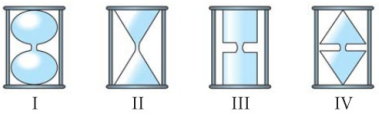




The rate that water rises will decrease steadily because the container gets wider from the bottom to the top. So, A is the correct answer.

Nov 9-9:25 AM

An hourglass has two compartments that hold sand. The graph at the right shows the height of the sand in the bottom container as it fills. Which hourglass does the graph represent? Explain your choice.



Nov 9-10:53 AM

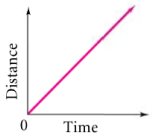
Try

You pour juice into a pitcher like the one shown in the photographs below. You pour the juice at a constant rate. Make a sketch to show the height of juice in the pitcher as you fill it.

Nov 9-10:55 AM

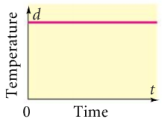
3 The graph at the right shows the time and distance of a moving object. Which of the following situations could be described by the graph?

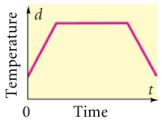
F A car travels at a steady speed.
G A cyclist slows down as she rides up a hill and speeds up as she peddles over the top.
H A train slows down as it arrives at the station.
J A plane accelerates steadily down the runway until it takes off.

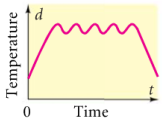


Nov 9-9:30 AM

. **Cooking** You turn on your oven to bake a casserole. Which graph best represents the oven temperature over time? Explain your choice.

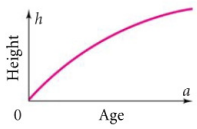
A.


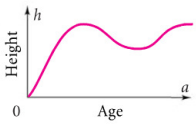
B.


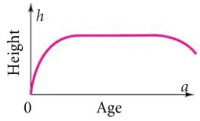
C.


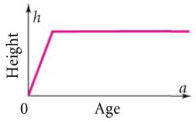
Nov 9-10:08 AM

Multiple Choice Which graph best represents a person's height from birth to age 80?

A


B


C


D


Nov 9-10:08 AM

Try

Sketch a graph of each situation. Label each section.

5. hours of daylight over the course of one year

6. your distance from the ground as you ride a Ferris wheel for five minutes

7. your pulse rate as you watch a scary movie

8. your walking speed during five minutes between classes

Nov 9-9:33 AM