

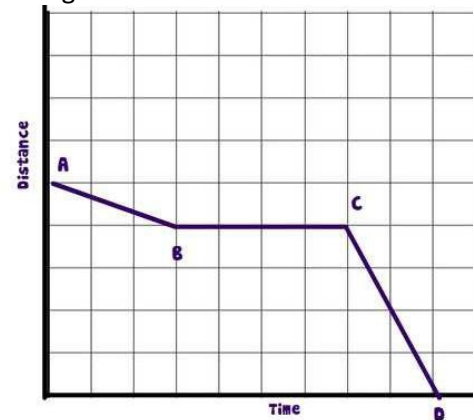
Name _____

1. An Airplane is descending to land at the airport. During its descent it had to fly in circles until the landing was cleared of other planes. Explain what is occurring during each of the segments.

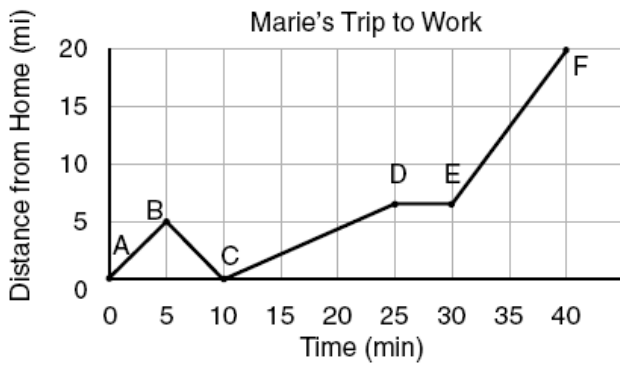
A-B

B-C

C-D



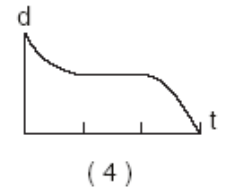
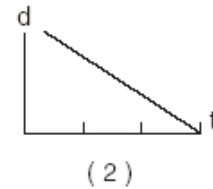
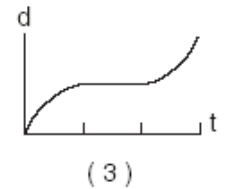
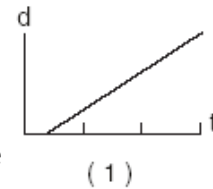
2. The accompanying graph shows Marie's distance from home (A) to work (F) at various times during her drive.



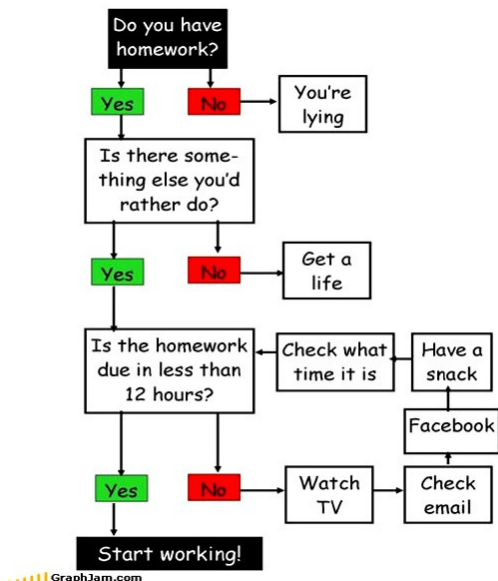
A. Marie left her briefcase at home and had to return to get it. State which point represents when she turned back around to go home and explain how you arrived at that conclusion.

B. Marie also had to wait at the railroad tracks for a train to pass. How long did she wait?

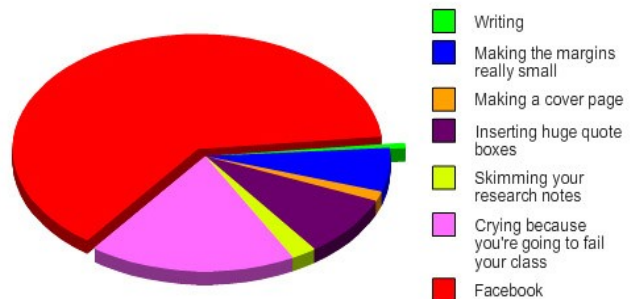
3. A bug travels up a tree, from the ground, over a 30-second interval. It travels fast at first and then slows down. It stops for 10 seconds, then proceeds slowly, speeding up as it goes. Which sketch best illustrates the bug's distance (d) from the ground over the 30-second interval (t)?



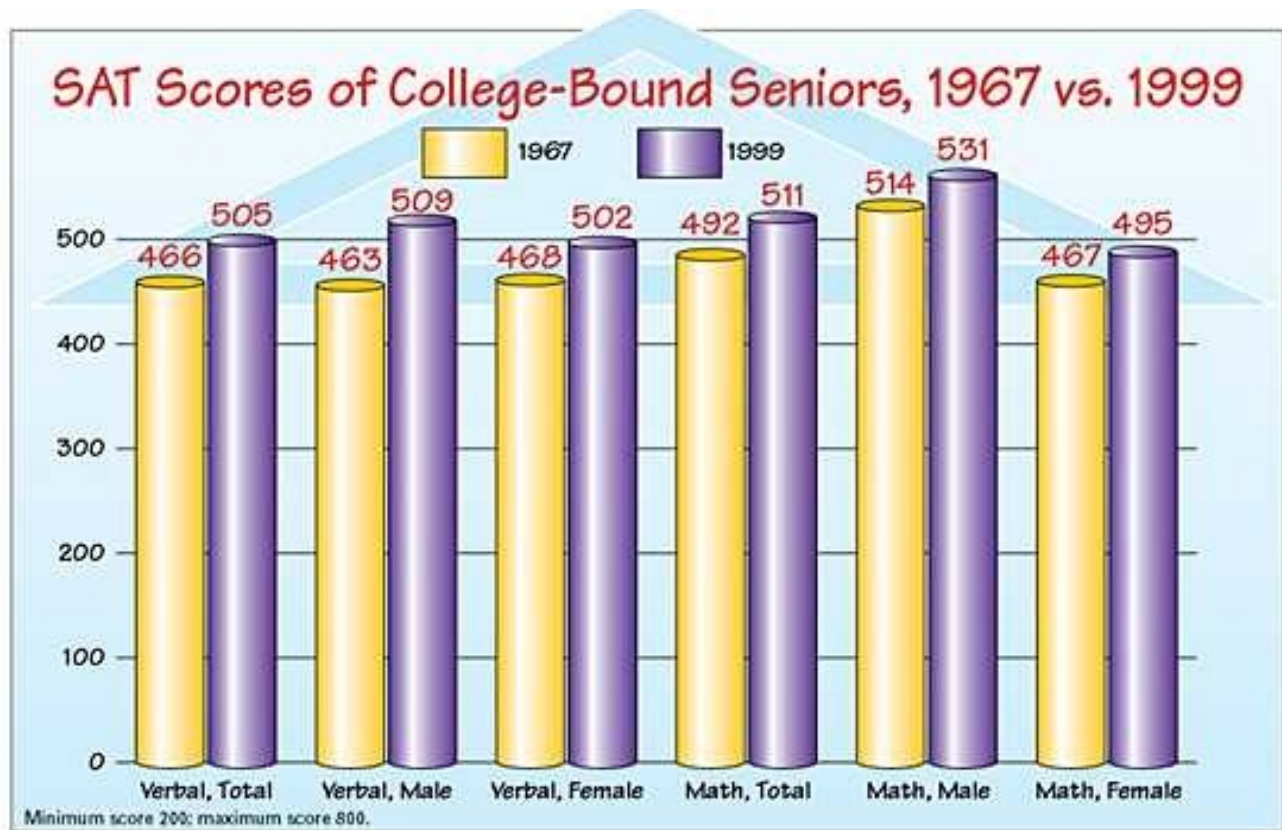
4. Tricky... if the bug was traveling down the tree instead of up, what would the graph look like? (Make sure you read the graphs!)



Use of time before 15 page essay due in 12 hours



- Writing
- Making the margins really small
- Making a cover page
- Inserting huge quote boxes
- Skimming your research notes
- Crying because you're going to fail your class
- Facebook



SOURCE: Based on data from the College Board and College Entrance Examination Board, New York, NY, *National College Bound Senior*

1. What do the light and dark bars represent?
2. What are the numbers on the top of the columns? How do you know?
3. What are the minimum and maximum scores obtainable on the SAT?
(Hint: Look at the small print on the bottom left corner of the graph).
4. Who scored highest on the verbal portion of the test in 1999?
5. What is the difference between the total math score in 1967 and 1999?
6. Is the combined score for the 1967 and 1999 verbal portion of the test higher for males or females?
7. Describe the trend in SAT scores of 1967 to 1999.

Procedure

1. Use the data table below and the attached graph paper to plot the mass and volume of the 5 samples of the minerals galena below. Note: the resulting line you plot is the minerals density!
2. Calculate the density of samples 1-5 and place the value in the "density" column of the data table below.
3. Answer the questions below.

Sample	Size	Mass	Volume	Density ($d=m/v$)
1	small	15 g	2 cm ³	
2		60 g	8 cm ³	
3		120 g	16 cm ³	
4	▼	480 g	64 cm ³	
5	large	750 g	100 cm ³	

Questions

1. Use the completed graph to determine how much mass a sample of galena would have if its volume was 75 cm³
2. Use the completed graph to determine how much volume a sample of galena would have if it's mass was 300 g.
3. Describe the relationship between mass and volume shown by the graph.
4. How does the density of Sample 2 compare to that of Sample 4?
5. How did the density of the largest sample (5) compare to the smallest sample (1)?
6. What is the effect of sample size on the density of a material?

