

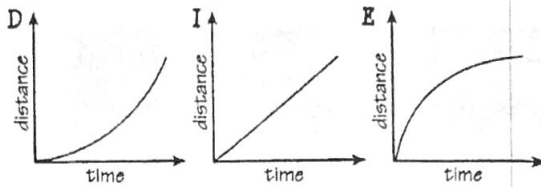
Why Did the Skeleton Visit a Butcher Shop?

Choose the best graph for the situation. Write the letter of your choice in each box with the exercise number.

Suppose you are riding a bike.
Let x = time; y = distance traveled.

Which graph shows:

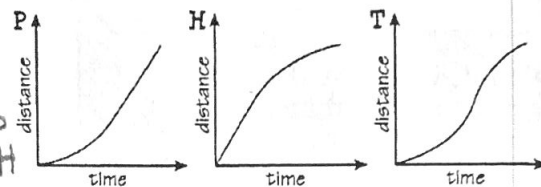
1. Speeding up (acceleration)? **D E**
2. Slowing down (deceleration)? **E**
3. Constant speed? **I**



Suppose you are walking to school.
Let x = time; y = distance traveled.

Which graph shows:

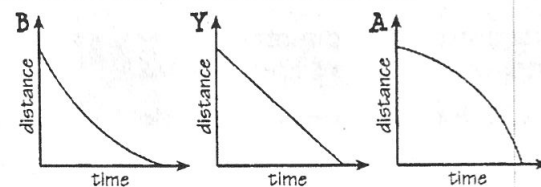
4. Speeding up, then slowing down? **T P H**
5. Speeding up, then constant speed? **P H**
6. Constant speed, then slowing down? **H**



Suppose you are running home.
Let x = time; y = distance from home.

Which graph shows:

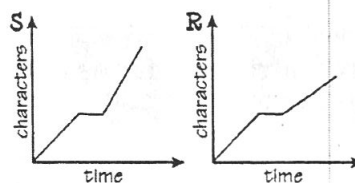
7. Constant speed? **Y**
8. Speeding up as you get closer? **A B**
9. Slowing down as you get closer? **B**



Suppose you are writing a story on a computer.
Let x = time; y = number of characters typed.

Which graph shows:

10. Constant speed, then stop, then a faster constant speed? **S**
11. Constant speed, then stop, then a slower constant speed? **R**

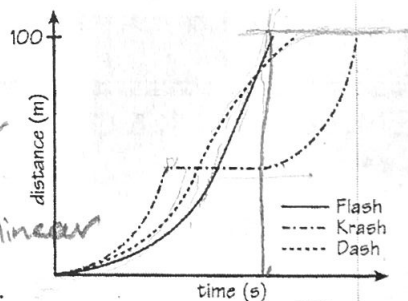


4 6 2 7 6 8 1 10 5 8 11 2 11 3 9 10
T H E Y A A D S P A R T E R T H S

The Hurdles Race

This sketch graph shows what happened when three athletes, Flash, Krash, and Dash, competed in a 100-meter hurdles race.

- a. How do you know that all three athletes were accelerating at the beginning of the race? **steeper**
- b. Which athlete slowed down near the end of the race? How do you know? **Dash**
- c. Which athlete maintained a constant speed during the last half of the race? How do you know? **Flash linear**
- d. Why might part of the graph for Krash be horizontal?
- e. Who won the race? **Flash** Just for Fun: Try calling the race.



Introduction to Graphs and Functions:
Modeling Situations With Graphs
Adapted from *The Language of Functions and Graphs*,
Shell Centre for Mathematics Education, 1997