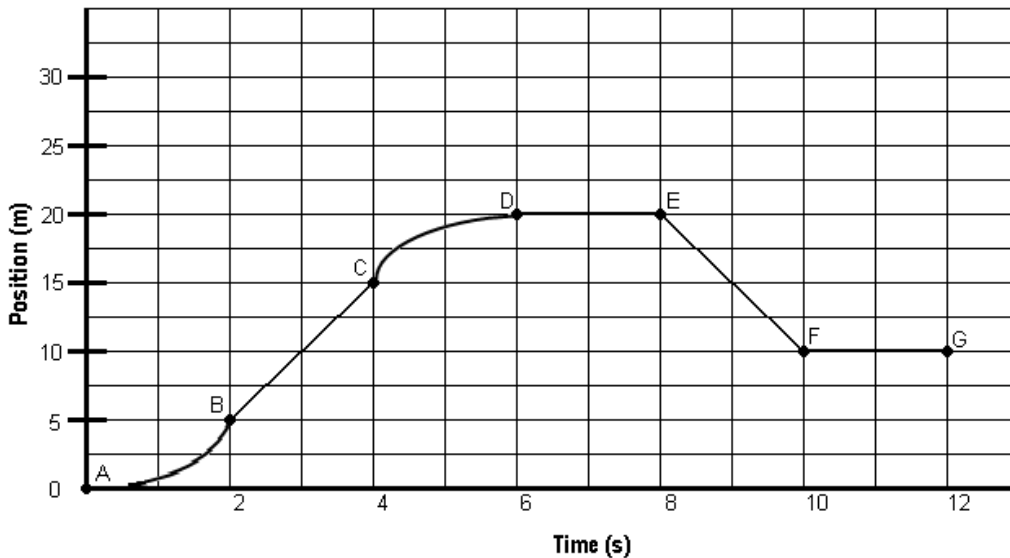


Motion Graph

Directions: For the two graphs provided, determine which type of motion is occurring. Answer the questions below the graph, being **as specific as possible**.

Position vs. Time



1. What is the physical significance of the slope of a position versus time graph? speed
2. What is the distance traveled between points B and C? 10 m
3. Calculate the velocity between points B and C.

$$v = \frac{d}{t} = \frac{10m}{2s} = 5 \frac{m}{s} \text{ away or } +5 \frac{m}{s}$$

4. What is the distance traveled between points D and E? 0 m
5. During which interval(s) was the object traveling at constant speed? BC EF
6. During which interval(s) was the object accelerating? AB
7. During which interval(s) was the object decelerating? CD
8. During which interval(s) was the object at rest? DE FG
9. What was the displacement for the entire trip? +10 m