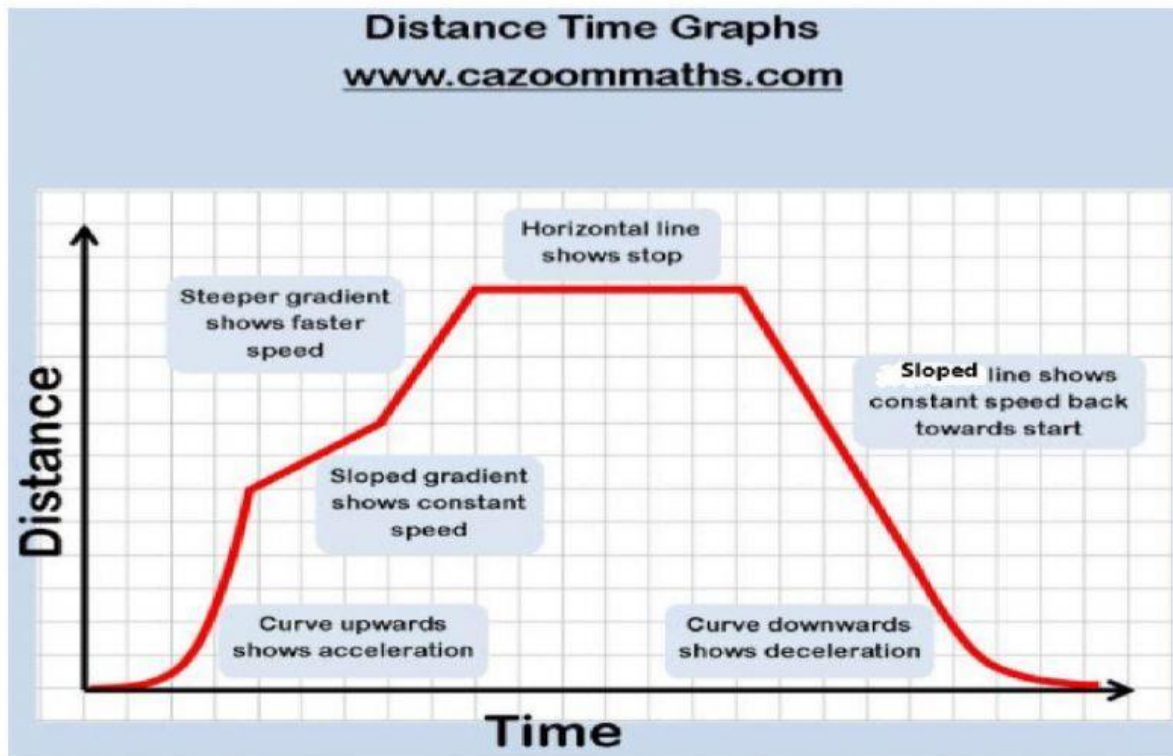


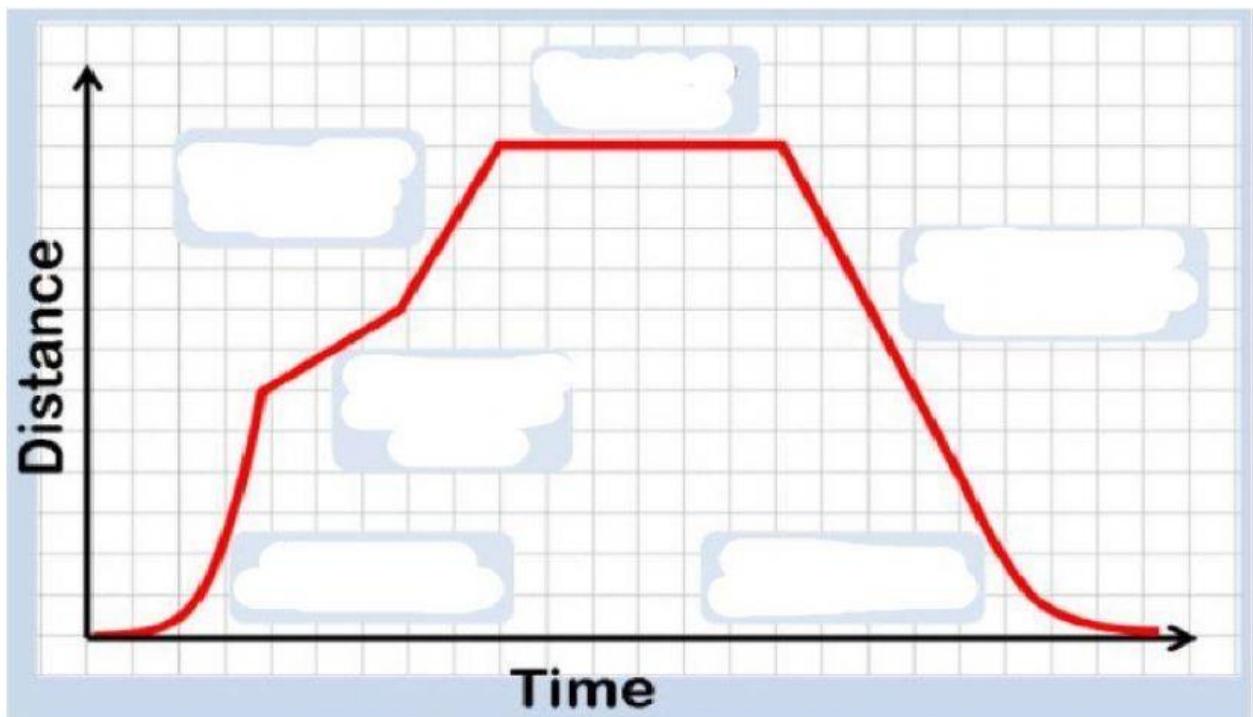
Interpreting Motion Graphs



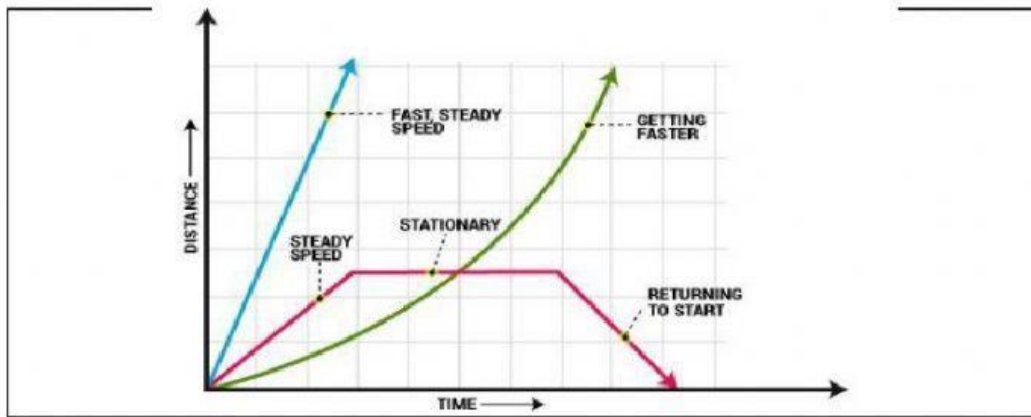
Part I

interpreting graphs

Use the graph above to complete the missing information inside the boxes



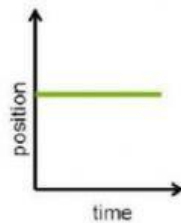
Part II



Multiple Choice

1. This position vs time graph (speed) represents

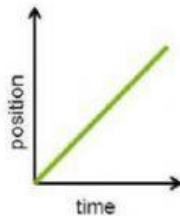
answer



a) Object is not moving is stationary b) object is speeding c) constant speed

2. This position vs time graph (speed) represents

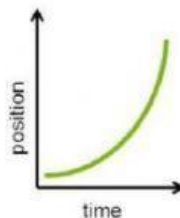
answer



a) Constant speed or steady speed b) accelerating c) not moving

3. This position vs time graph (speed) represents

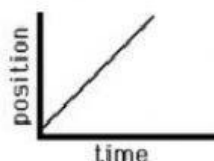
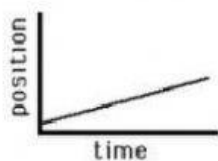
answer



a) Rest b) accelerating/ getting faster up c) slowing down

4. These two graphs represent constant speed
Which graph is faster, the left or the right graph?

answer



a) **Left graph**

b) **Right graph**

5)

- **Speed** only has **magnitude**
- **Velocity** has **magnitude and direction**

Write **speed** or **velocity**

5 m/s _____

5 m/s North _____

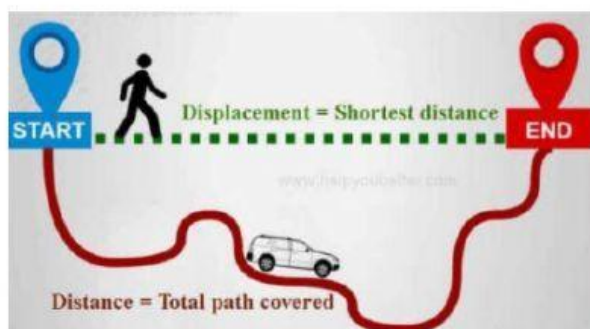
40 kilometer per hour _____

40 kilometer per hour South _____

456 miles/second _____

456 miles/second going West _____

6)



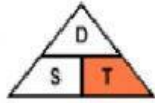
What is **displacement**? _____

What is **distance**? _____

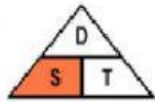
Use this diagram to complete questions 7, 8, and 9.



$$\text{Distance} = \text{Speed} \times \text{Time}$$



$$\text{Time} = \frac{\text{Distance}}{\text{Speed}}$$



$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

7) What is the formula to find the **Distance**?

$$\text{Distance} = \boxed{} \times \boxed{}$$

8) What is the formula to find the **Time** of travel?

$$\text{Time} = \frac{\boxed{}}{\boxed{}}$$

9) What is the formula to find the **Speed**?

$$\text{Speed} = \frac{\boxed{}}{\boxed{}}$$

10)

You drove a **distance of 48 miles** and the **time you took was 6 hours**.

What was your speed?

d = 48 miles

t = 6 hours

$$S = \frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$