Interpreting Motion Graphs

Distance Time Graphs
www.cazoommaths.com

Horizontal line shows stop

Steeper gradient shows faster speed

Sloped line shows constant speed back towards start

Sloped gradient shows constant speed

Curve upwards shows acceleration

Curve downwards shows deceleration

Distance
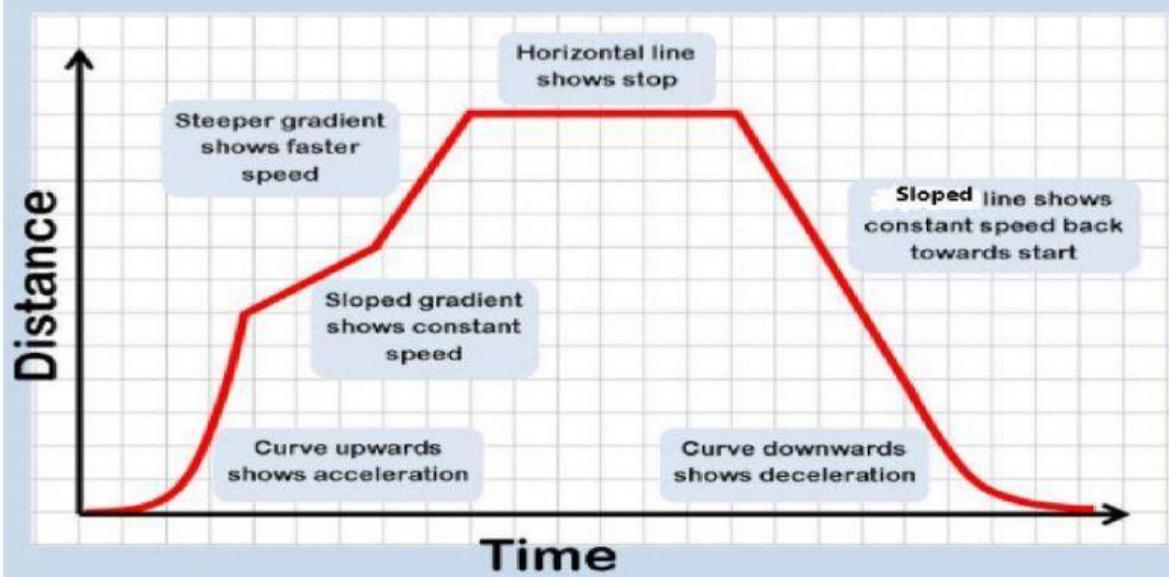
Time

Part I

interpreting graphs

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

Distance

Time

Part II

FAST, STEADY SPEED

GETTING FASTER

STEADY SPEED

STATIONARY

RETURNING TO START

DISTANCE
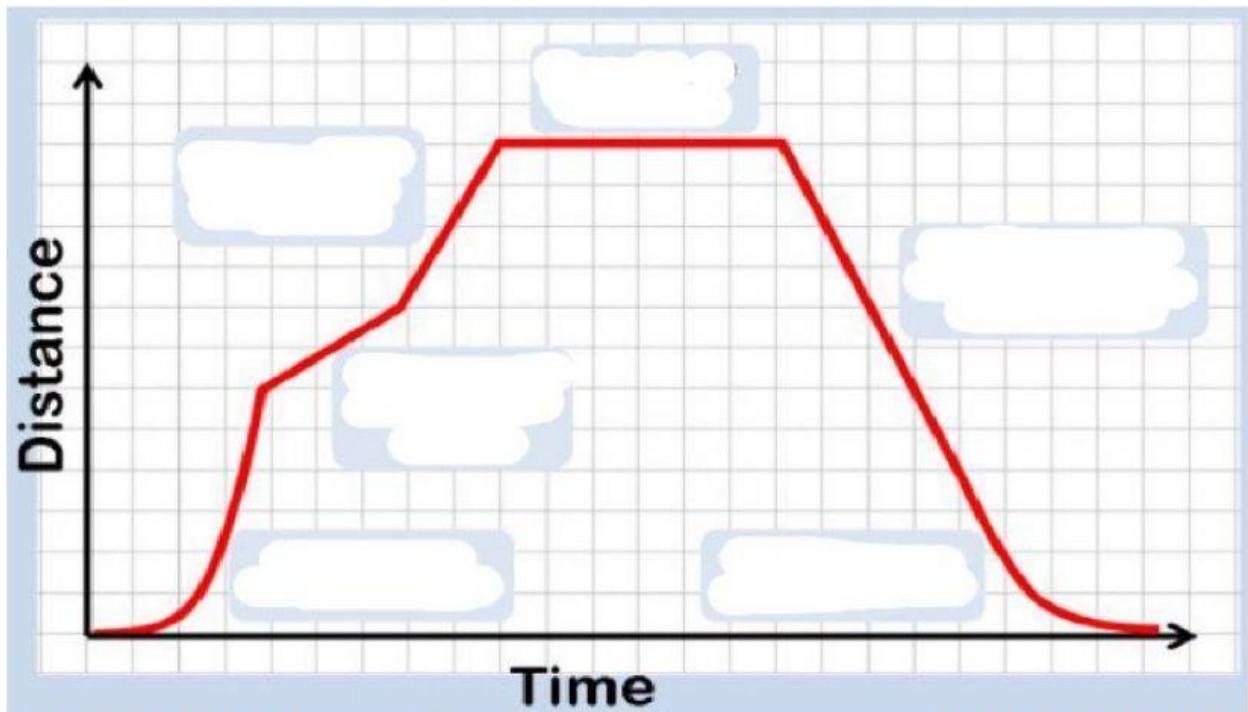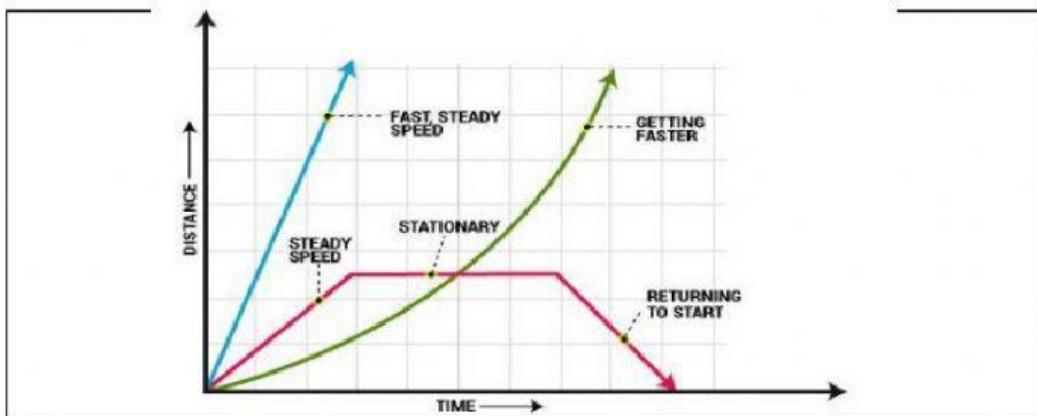
TIME

Multiple Choice
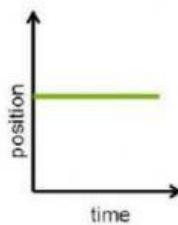
	answer
1. This position vs time graph (speed) represents position / time **a) Object is not moving is stationary b) object is speeding c) constant speed**	

	answer
2. This position vs time graph (speed) represents position / time **a) Constant speed or steady speed b) accelerating c) not moving**	
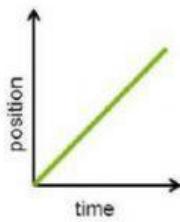
|	answer
3. This position vs time graph (speed) represents position / time **a) Rest b) accelerating/ getting faster up c) slowing down**	
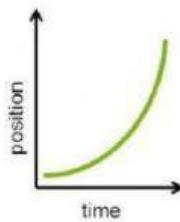
Use this digram to complete questions 7, 8, and 9.
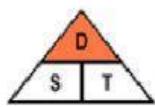
Distance = Speed x Time
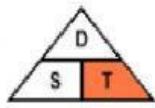
Time = $\dfrac{Distance}{Speed}$
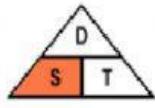
Speed = $\dfrac{Distance}{Time}$

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

Distance = [ ] x [ ]

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

Time = $\dfrac{}{}$

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

Speed = $\dfrac{}{}$

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 = $\dfrac{}{}$ = $\dfrac{}{}$ = [ ]