



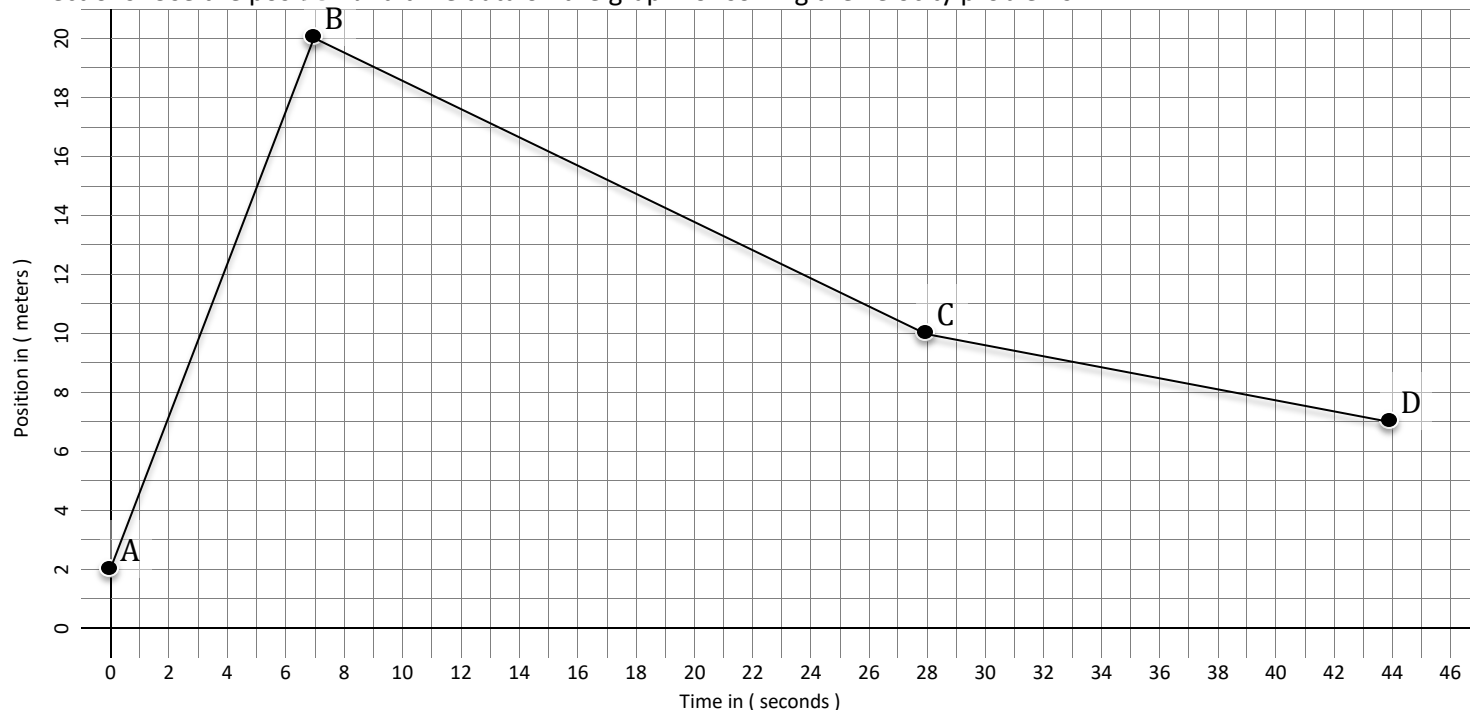
Full Name: _____ Due: M T W Th F ____/____/____

Graphing Motion Worksheet #1

Finding velocity from the slope of a line.

Class Period _____

Directions: Use the position and time data on the graph for solving the velocity problems.



1. Find the velocity from point A to point B.

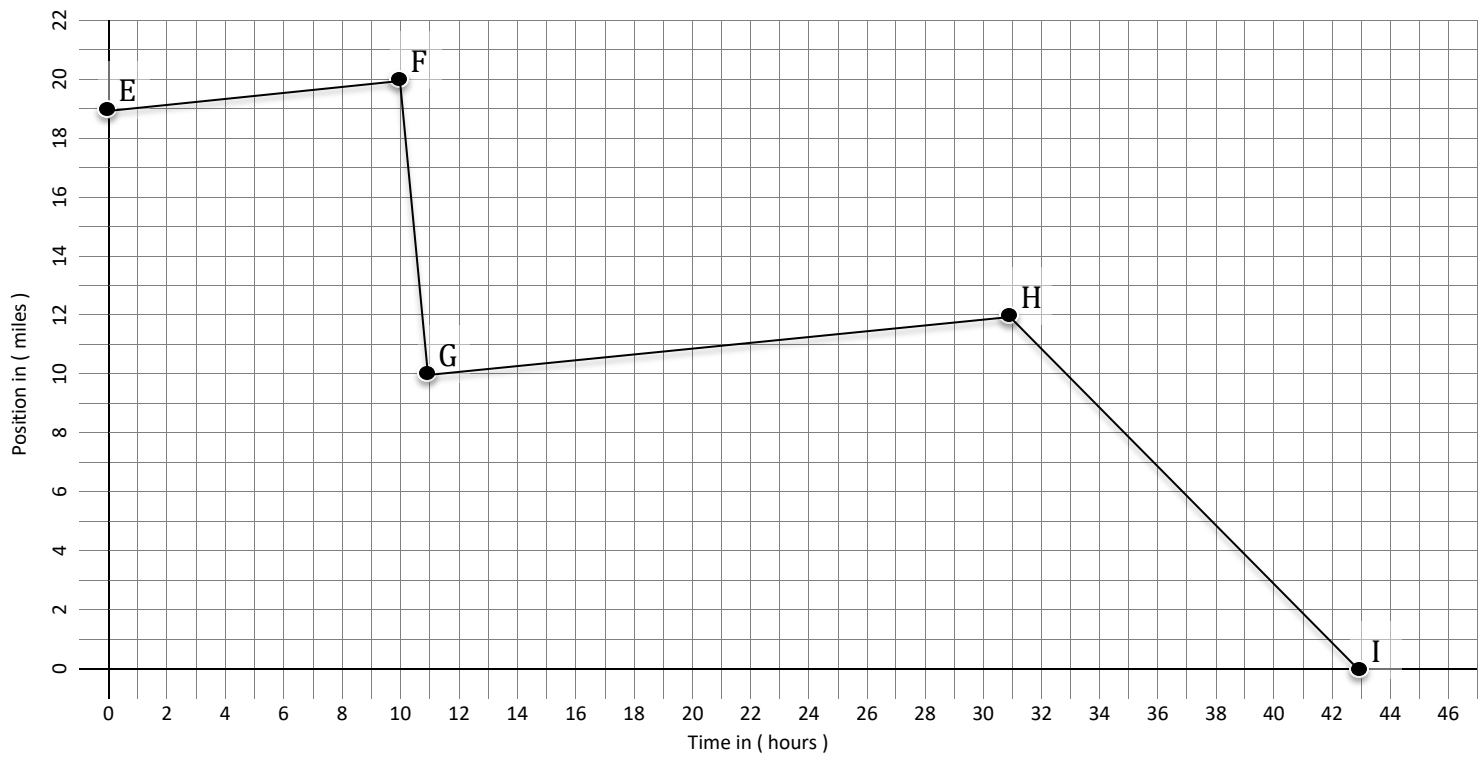
Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
$\frac{\text{Position Final} - \text{Position Initial}}{\text{Time Final} - \text{Time Initial}} = \frac{\Delta P}{\Delta t}$			
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	

2. Find the velocity from point B to point C.

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
$\frac{\text{Position Final} - \text{Position Initial}}{\text{Time Final} - \text{Time Initial}} = \frac{\Delta P}{\Delta t}$			
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	

3. Find the velocity from point C to point D.

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
$\frac{\text{Position Final} - \text{Position Initial}}{\text{Time Final} - \text{Time Initial}} = \frac{\Delta P}{\Delta t}$			
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	



4. Find the velocity from point E to point F.

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
$\frac{\text{Position Final} - \text{Position Initial}}{\text{Time Final} - \text{Time Initial}} = \frac{\Delta P}{\Delta t} =$			
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	

5. Find the velocity from point F to point G.

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
$\frac{\text{Position Final} - \text{Position Initial}}{\text{Time Final} - \text{Time Initial}} = \frac{\Delta P}{\Delta t} =$			
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	

6. Find the velocity from point G to point H.

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
$\frac{\text{Position Final} - \text{Position Initial}}{\text{Time Final} - \text{Time Initial}} = \frac{\Delta P}{\Delta t} =$			
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	

7. Find the Velocity from point H to point I

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
$\frac{\text{Position Final} - \text{Position Initial}}{\text{Time Final} - \text{Time Initial}} = \frac{\Delta P}{\Delta t} =$			
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	



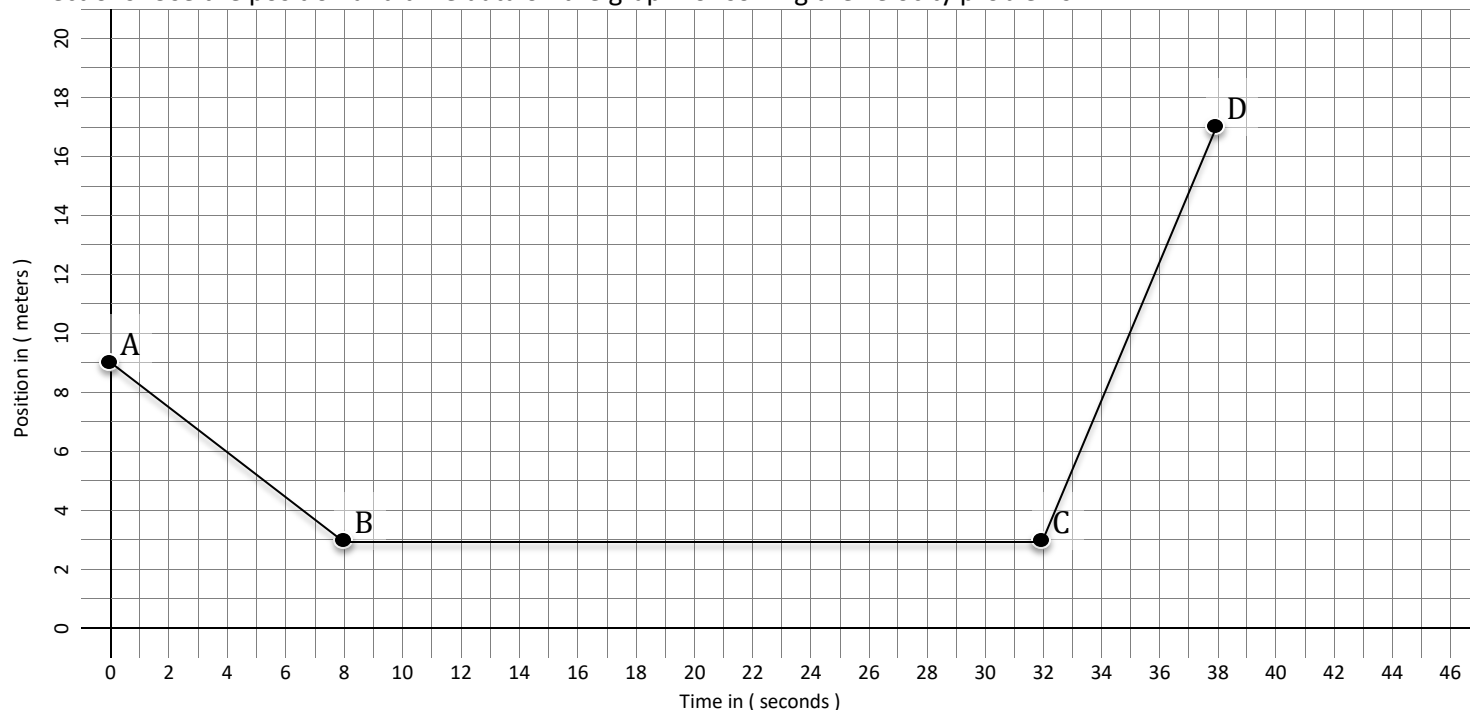
Full Name: _____ Due: M T W Th F ____/____/____

Graphing Motion Worksheet #2

Finding velocity from the slope of a line.

Class period: _____

Directions: Use the position and time data on the graph for solving the velocity problems.



1. Find the velocity from point A to point B.

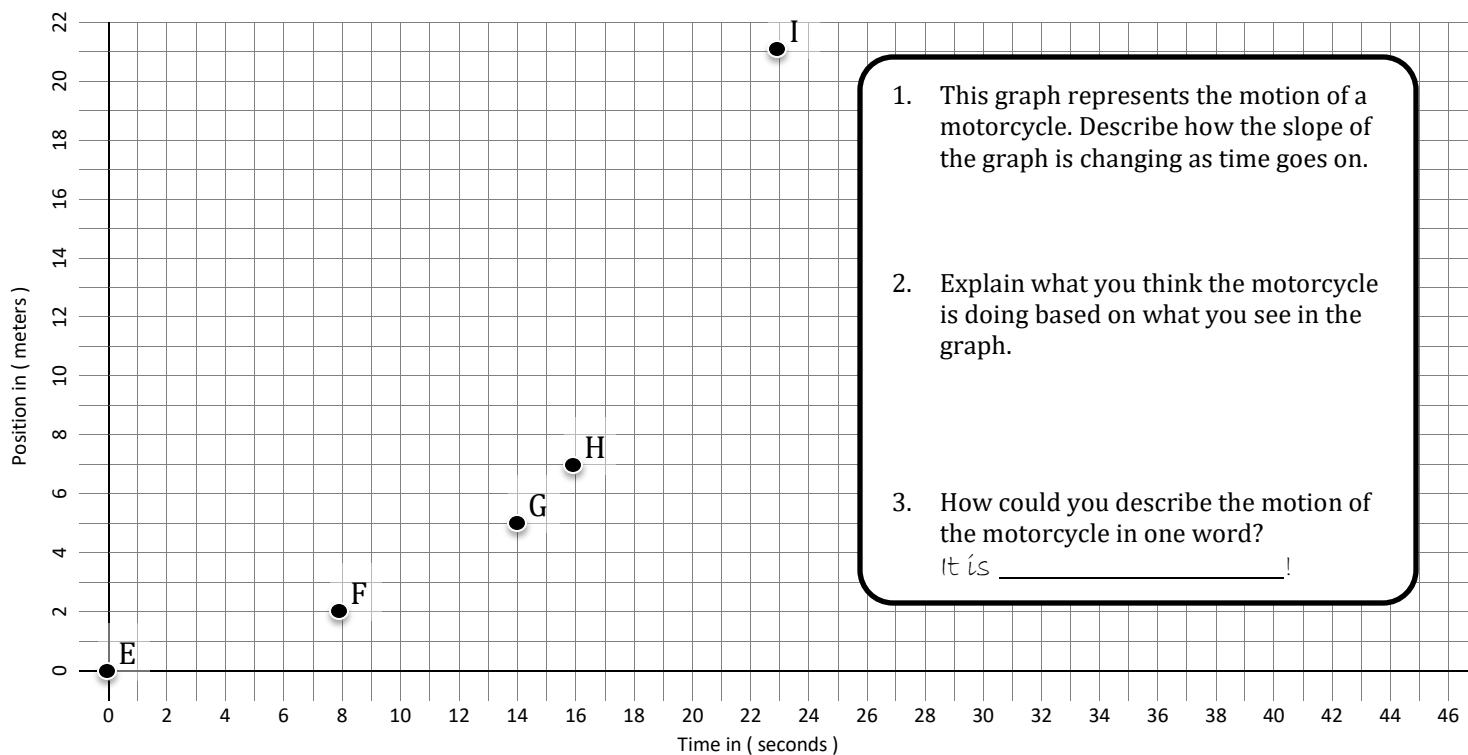
Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
$\frac{\text{Position Final} - \text{Position Initial}}{\text{Time Final} - \text{Time Initial}} = \frac{\Delta P}{\Delta t}$			
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	

2. Find the velocity from point B to point C.

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
$\frac{\text{Position Final} - \text{Position Initial}}{\text{Time Final} - \text{Time Initial}} = \frac{\Delta P}{\Delta t}$			
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	

3. Find the velocity from point C to point D.

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
$\frac{\text{Position Final} - \text{Position Initial}}{\text{Time Final} - \text{Time Initial}} = \frac{\Delta P}{\Delta t}$			
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	



1. This graph represents the motion of a motorcycle. Describe how the slope of the graph is changing as time goes on.

2. Explain what you think the motorcycle is doing based on what you see in the graph.

3. How could you describe the motion of the motorcycle in one word?
It is _____!

4. Find the velocity from point E to point F.

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
—	—	—	—
—	—	—	—
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	

5. Find the velocity from point F to point G.

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
—	—	—	—
—	—	—	—
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	

6. Find the velocity from point G to point H.

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
—	—	—	—
—	—	—	—
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	

7. Find the Velocity from point H to point I

Position Final (P_f)	Position Initial (P_i)	Change in Position (ΔP)	Velocity
—	—	—	—
—	—	—	—
Time Final (t_f)	Time Initial (t_i)	Change in Time (Δt)	