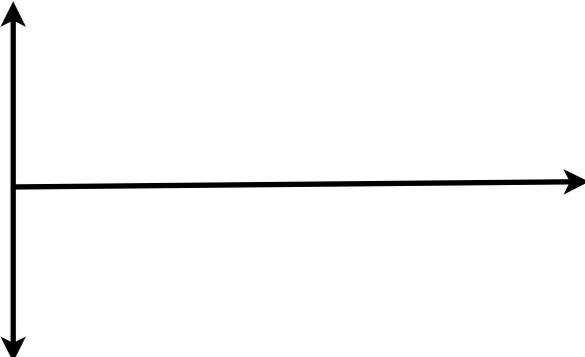
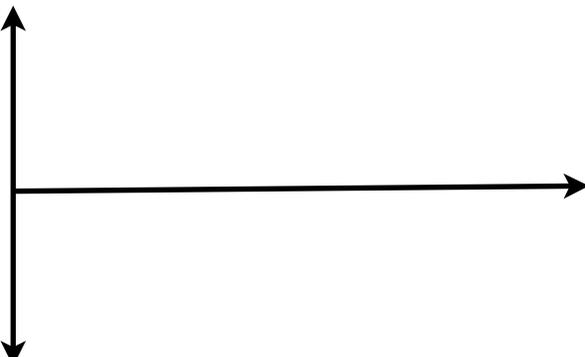
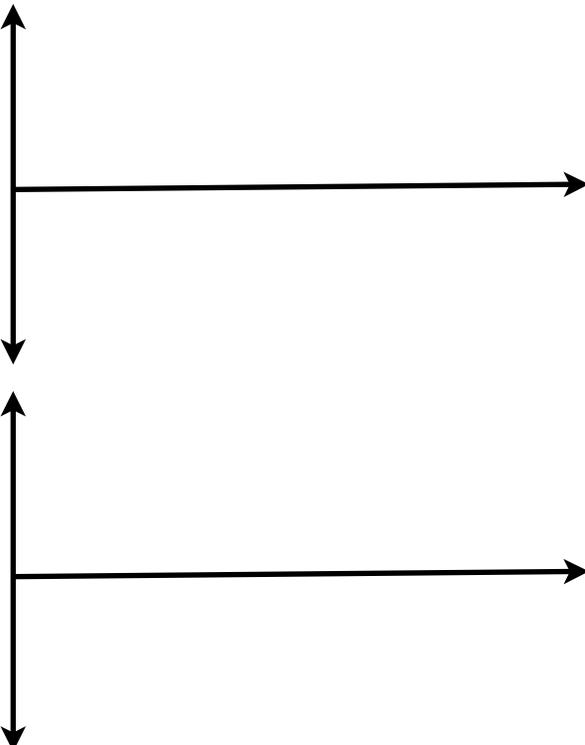
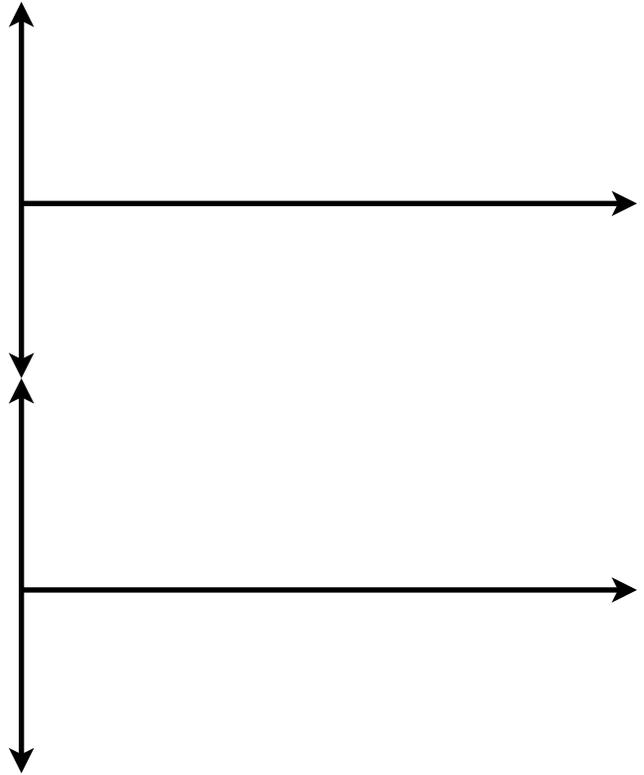


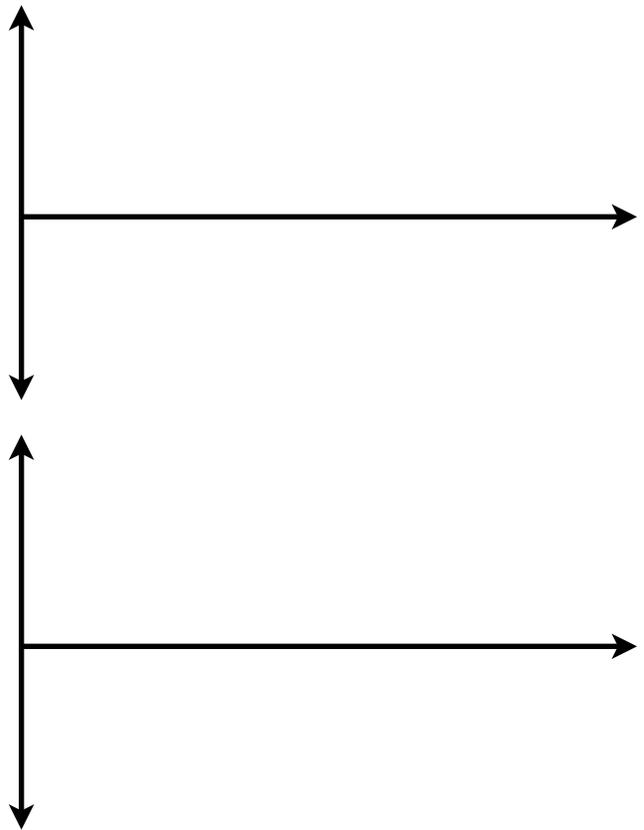
Moving Man with Velocity!

<p>1) Explain what the slope of a position vs time (X vs t) graph represents.</p>	
<p>2) In the space at the right, sketch a X vs t graph for an object that begins at the origin and has a positive slope.</p>	
<p>3) In the space at the right, sketch a X vs t graph for an object that begins far away from the origin and moves past the origin with a negative slope.</p>	
<p>4) Open Moving Man, click on the charts tab, close the acceleration graph, set position = 0m & velocity = 2m/s. Hit play and let the graph run for 10s. Sketch both the X vs t and V vs t graphs</p>	

5) Using Moving Man, set the **position = -10 & velocity = 2m/s**. Sketch both the X vs t and V vs t graphs.



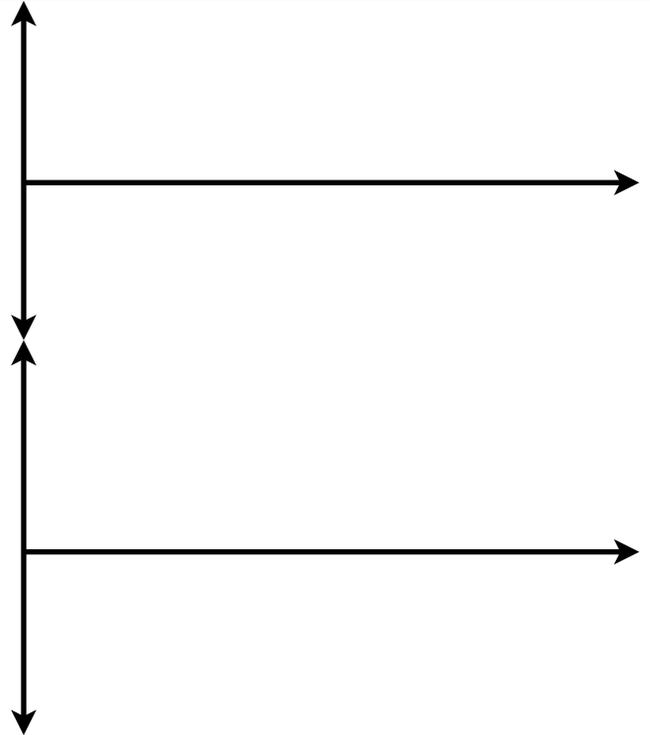
6) Using Moving Man, set the **position = 10 & velocity = -2m/s**. Sketch both the X vs t and V vs t graphs.



7) Select a starting position and velocity and sketch the results.

Position = _____ m

Velocity = _____ m/s



8) What are the units of the slope for a position vs. time graph?

9) For each position vs. time graph, what was the general shape of the graphs (ignoring direction)?

10) For each position vs time graph what was the shape of the corresponding velocity graph?

11) What is the relationship between the slope of a position vs time graph and the velocity of an object?

12) According to the position vs time graph for #5, what is the displacement of the Moving Man?

13) Calculate the **area under the velocity** graph #5 (area= length x height) What are the units of your answer?

14) What conclusions can be made about the relationship between position vs time and velocity vs time graphs for a moving object?

