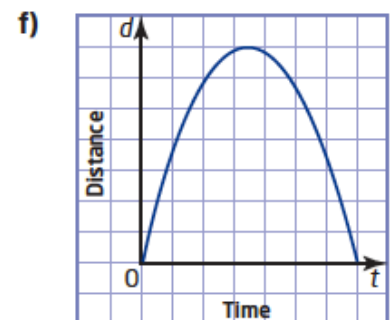
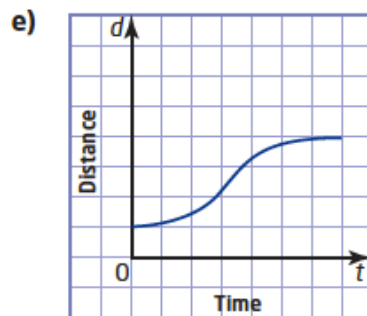
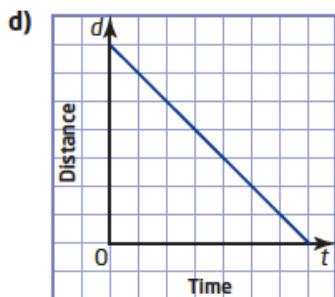
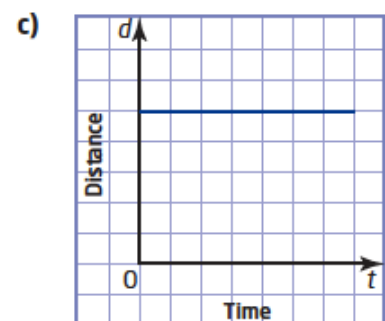
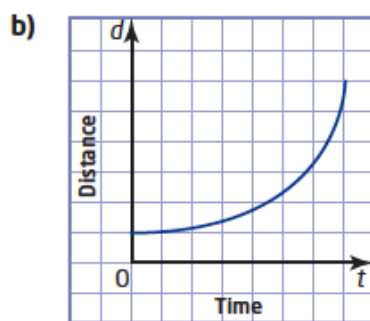
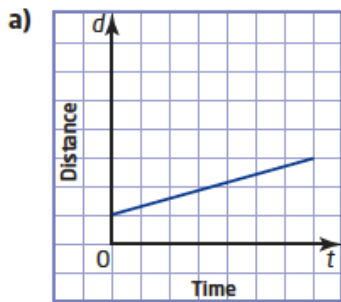


## 2.6 Distance Time Graphs Worksheet #2

MPM1D

1. Describe the motion shown in each distance-time graph. Write a few sentences describing a situation that could be represented by each graph.



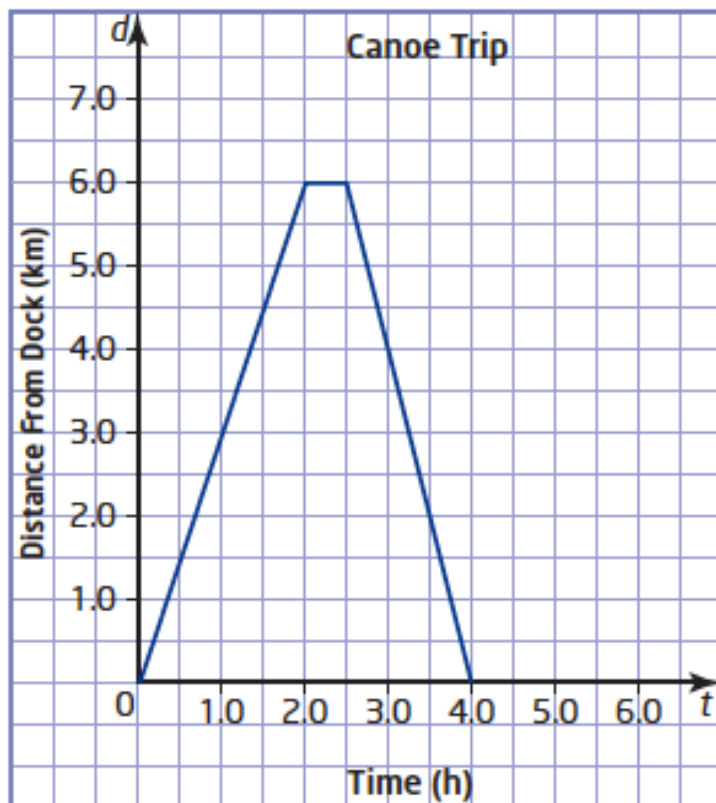
2. Which of the graphs in question 1 show linear relations between distance and time? Justify your answer.

3. A canoeist starts from a dock and paddles to the end of a lake and back. This graph shows the canoeist's distance from the dock during this trip.

a) How long did this trip take?

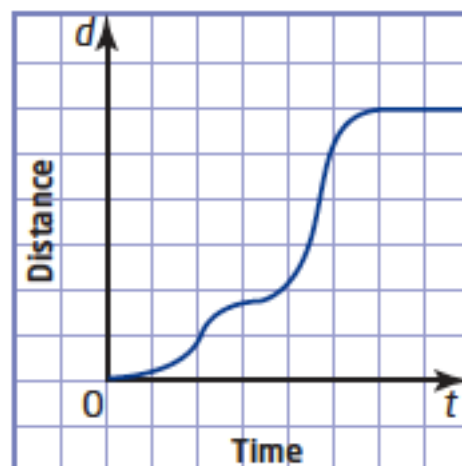
b) How far is it to the end of the lake?

c) What does the flat portion of the graph represent?



d) Was the canoeist travelling faster on the way out or on the way back?

4. This graph shows how far a cyclist has travelled from her starting point. Describe the cyclist's motion in a few sentences.

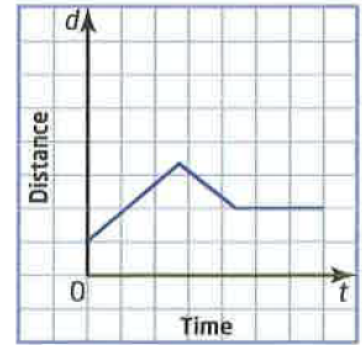


5. a) You are holding a rangefinder pointed at a nearby wall. Describe how you would move in order to match this graph.

b) How would the distance-time graph change if you walked faster?

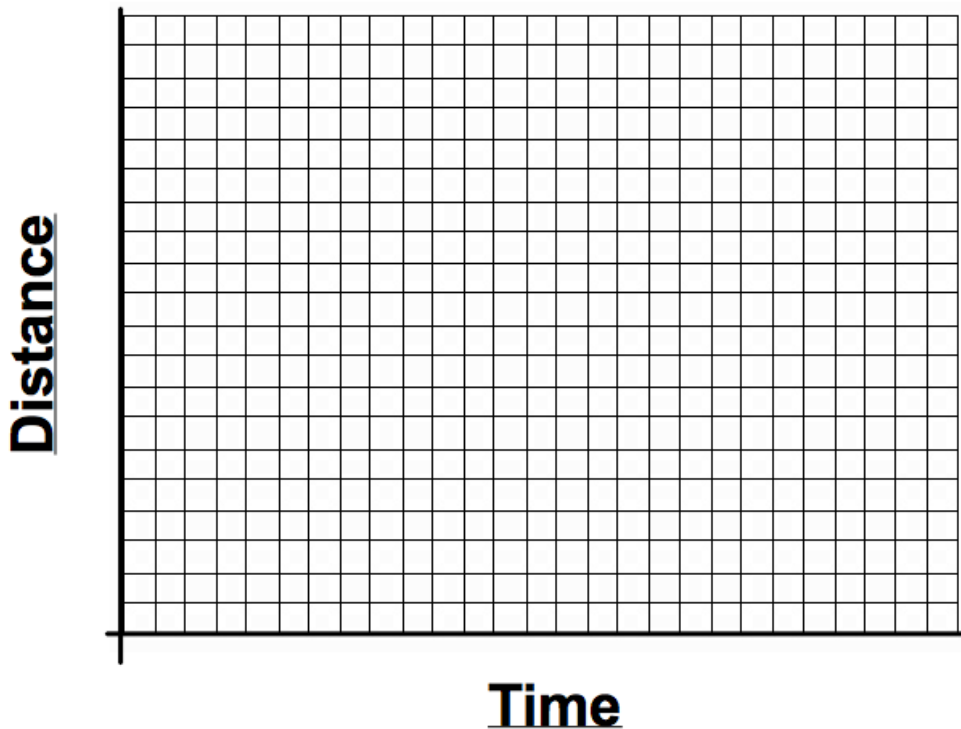
c) How would the graph change if you walked slower?

d) How would the graph change if you stopped sooner?



6. Draw a distance-time graph for this situation:

A student leaves home, walking at a steady pace. He slows down, then stops for a few seconds to mail a letter. He turns around and runs home at a constant speed.



7. Sketch a distance-time graph for a car that slowly speeds up after stopping at a traffic light.

