

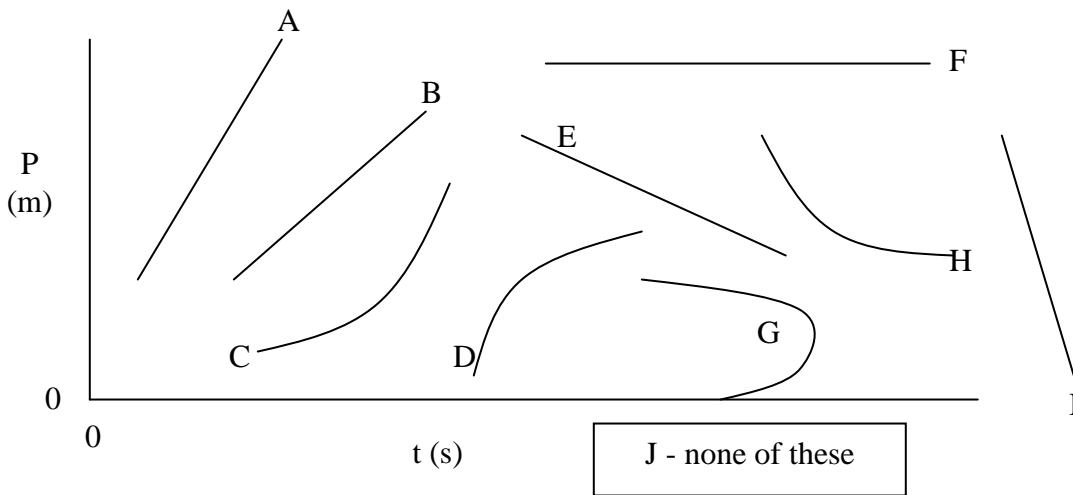
REVIEW #2

Conversions / Motion

1. A dollar bill is 6.0 inches long. The distance to the moon is 336,000 Km. How many dollars would be needed to reach to the Moon?
2. A person is riding a bus that is going 100 km/h. The person throws a ball up and catches it.
 - a. Before the throw, how fast is the ball traveling relative to the bus?
 - b. Before the throw, how fast is the ball traveling relative to a person on the street?
 - c. Draw the motion of the ball relative to the bus.
 - d. Draw the motion of the ball relative to the person on the street.
3. A car travels 20,000 m in 700 s. What is its average speed?
4. A car is traveling 10 m/s [EAST]. It accelerates to 13.5 m/s [EAST] in 7.5 s. What was its acceleration?
5. A truck is going 18 m/s [NORTH]. It accelerates at -0.5 m/s/s and it slows down to 15 m/s [NORTH]. How much time did this take?
6. How are speed and velocity different?
7. A person runs at 10 m/s for 6.0 s. She then walks at 3 m/s for 5.5 s. She then jogs 3 m/s for 10 s. She finally goes -4 m/s for 5 s. How far away from her starting point does she end up?
8. How many meters is 1500 inches?
- 9 Fill in the chart.

distance	time	velocity
6 m	3 s	
	20 s	200 m/s
120 m		10 m/s

10. Describe how a car could be seen as going 0 m.p.h. and 55m.p.h.



Use the Position vs. time graph above to answer the questions below

11. Which graph is impossible?
12. In which graph(s) is the object moving forward (positive direction)?
13. In which graph(s) is the object moving backward (negative direction)?
14. In which graph is the object moving fastest overall?
15. In which graph is the object speeding up forward?
16. In which graph is the object slowing down backward?
17. In which graph is the object speeding up backward?
18. In which graph is the object stopped?