Velocity and Acceleration	NAME: _____
Interpreting Graphs • PHYSICS	DATE: _____

INTERPRETING GRAPHICAL INFORMATION

(A.) (B.) (C.) (D.) (E.)
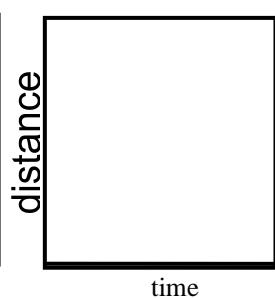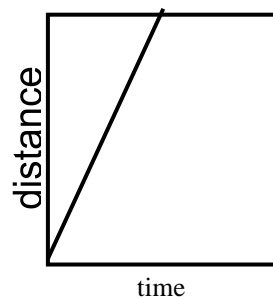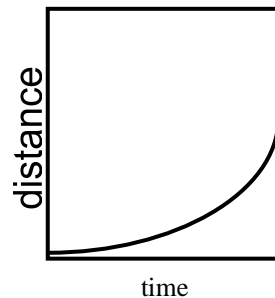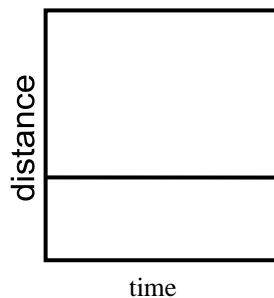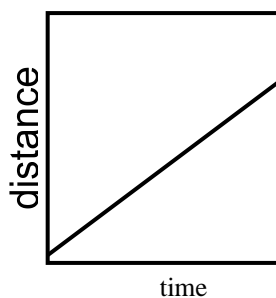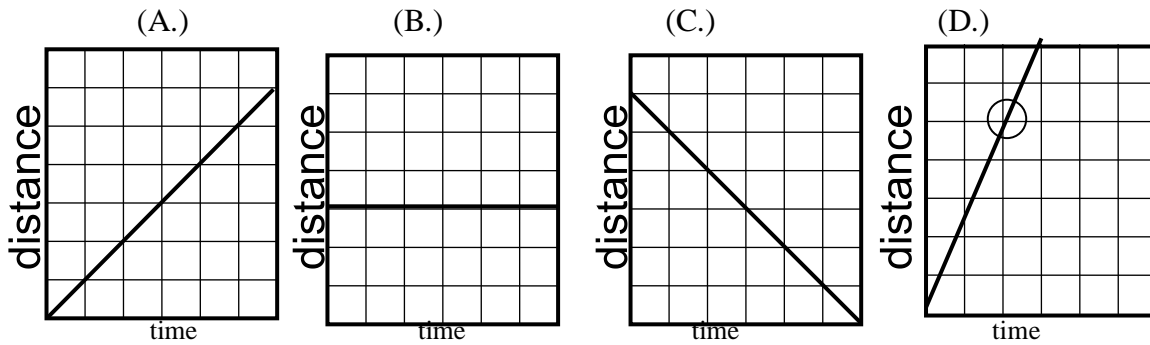

1. Which graph(s) represent(s) constant speed?

2. Which graph(s) represent(s) a plot of zero speed?

3. Which graph(s) represent(s) variable speed?

4. Which graph represents the fastest growing speed (all graphs are of the same time interval)?

Suppose graph (B.) were a plot of velocity vs. time instead of distance vs. time. For the following questions choose your answer from A – E above.

5. What would the corresponding graph of distance vs. time look like?

6. How about the graph of acceleration vs. time...what would that look like?

Suppose graph (A.) were a plot of velocity vs. time instead of distance vs. time. For the following questions choose your answer from A – E above.
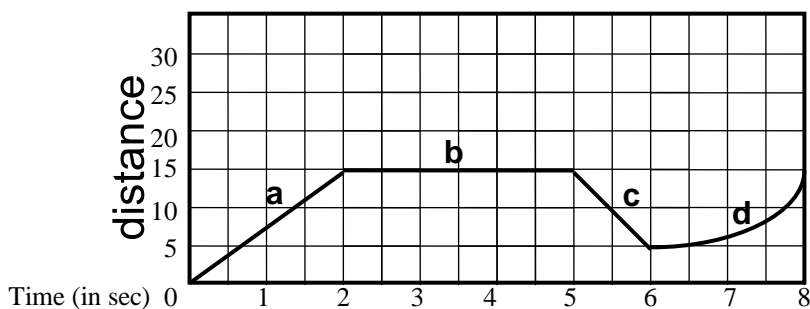
7. What would the corresponding graph(s) of distance vs. time look like?

8. How about acceleration vs. time?

(A.)	(B.)	(C.)	(D.)

distance / time (A.) — increasing line

distance / time (B.) — horizontal line

distance / time (C.) — decreasing line

distance / time (D.) — steep increasing line with circle

1. What is the distance traveled after two seconds have passed in graph (A.)? _____ In graph (B.)? _____ In graph (C.)? _____ In graph (D.)? _____ Number answers are needed here.

2. What is the average speed represented in graph (A.)? _____ In graph (B.)? _____ In graph (C.)? _____ In graph (D.)? _____ Number answers are needed here.

3. Suppose that the graphs now represent velocity vs. time instead of distance vs. time.

   a. How much distance is traveled in graph (B.)?

   b. What is the acceleration in graph (A.)? _____ In graph (B.)? _____ In graph (C.)? _____ In graph (D.)? _____ Number answers are needed here.

   c. Which graph(s) represent(s) accelerated motion?

   d. Which graph(s) represent(s) decceleration?

distance vs. Time (in sec) graph with portions a, b, c, d; y-axis marked 5, 10, 15, 20, 25, 30; x-axis marked 0, 1, 2, 3, 4, 5, 6, 7, 8

Answer the following questions:

1. The distance traveled during portion (b.) is _____.

2. The acceleration during portion (a.) is _____.

3. At which portion of the graph is the velocity negative? _____.

4. Is the speed constant in portion (d.)? _____

5. What is the speed at t= 1 sec.? _____