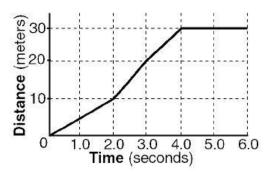
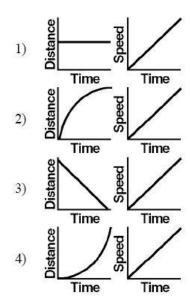
## CW 1.1 - Graphing Motion Multiple Choice

1. The distance-time graph below represents the position of an object moving in a straight line. What is the speed of the object during the time interval t = 2.0 seconds to t = 4.0 seconds?

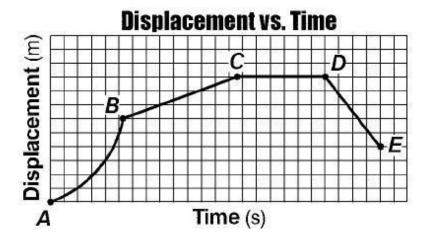


- **A.** 10. m/s
- **B.** 5.0 m/s
- **C.** 0.0 m/s
- **D.** 7.5 m/s
- 2. Which pair of graphs represents the same motion?

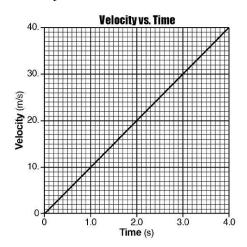


- **A.** 1
- **B.** 2
- **C.** 3
- **D.** 4

**3.** The displacement-time graph below represents the motion of a cart initially moving forward along a straight line. During which interval is the cart moving forward at constant speed.

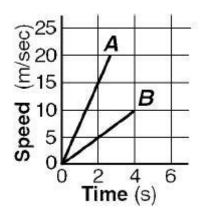


- **A.** AB
- **B.** CD
- **C.** BC
- **D.** DE
- **4.** The graph below shows the velocity of a race car moving along a straight line as a function of time. What is the magnitude of the displacement of the car from t = 2.0 seconds to t = 4.0 seconds?

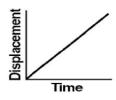


- **A.** 80. m
- **B.** 20. m
- **C.** 60. m
- **D.** 40. m

**5.** The graph below shows the relationship between speed and time for two objects, A and B. Compared with the acceleration of object B, the acceleration of object A is:

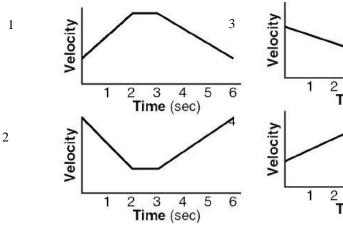


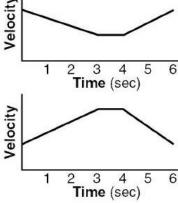
- **A.** three times as great
- **B.** the same
- **C.** one-third as great
- **D.** twice as great
- **6.** The graph below represents the motion of an object. According to the graph, as time increases, the velocity of the object



- **A.** increases
- **B.** decreases
- **C.** remains the same

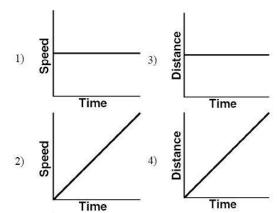
7. Which graph best represents the relationship between velocity and time for an object which accelerates uniformly for 2 seconds, then moves at a constant velocity for 1 second, and finally decelerates for 3 seconds?





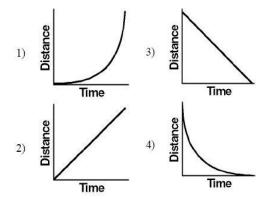
- A. 1 В. 2
- C. 3
- D. 4

8. Which graph best represents the motion of an object initially at rest and accelerating uniformly?

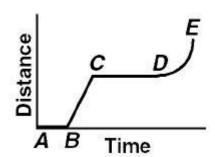


- A. 1
- 2 B.
- C. 3
- D. 4

**9.** Which graph best represents the motion of an object whose speed is increasing?



- **A.** 1
- **B.** 2
- **C.** 3
- **D.** 4
- **10.** The graph below represents the relationship between distance and time for an object in motion. During which interval is the speed of the object changing?



- A. CD
- **B.** AB
- **C.** BC
- **D.** DE