

CHAPTER REVIEW**Chapter 12****Motion****I. Vocabulary Review**

If the underscored word or phrase makes the sentence true, write "TRUE" in the space provided. If the underscored word or phrase makes the sentence false, write the correct term or phrase in the space provided.

- _____ 1. Displacement is how far you travel when you change position.
- _____ 2. Displacement is the net change in position of an object.
- _____ 3. To calculate average speed, divide the distance by the time.
- _____ 4. Speed is a measure of motion that tells how fast and in which direction an object moves.
- _____ 5. Acceleration is the rate at which one's velocity is changing.
- _____ 6. To describe the position of an object, you must use relative velocity.
- _____ 7. If you travel on a curved road from one town to another, your displacement is measured along a straight line between the two towns.
- _____ 8. If you travel on a curved road from one town to another, your velocity is calculated by dividing displacement by time.

II. Concept Review

In the blank, write the word or words that best complete the sentence.

9. When you ride a merry-go-round at a constant speed, you experience an acceleration that is directed toward the _____ of the curve.
10. At a park, you take 10 minutes to walk a 1/2 mile trail, rest 10 minutes, and then walk 10 more minutes to return to the point where you started. Your average speed over this 30 minute period is _____ miles per hour.
11. If you walk all the way around a lake, your _____ will actually be zero because you ended at the same place you started.
12. You walk 25 meters west, and then reverse your direction and walk 15 meters east. If this movement requires 10 seconds, your average velocity is _____.
13. Suppose you are in a car stopped at an intersection. The car next to you starts to move. For a moment you think you are moving backward because of the _____ of the two cars.

Chapter Review 12 (continued)

14. On the highway, a force presses you toward the back of your seat when your car is undergoing positive _____.
15. When traveling around a curve, the distance will be _____ than the displacement.
16. John rides his bike over the top of a hill at a speed of 4.0 m/s. Four seconds later his speed is 24 m/s. John is accelerating at _____ per s^2 .

III. Skills/Process Review

Use the graphs in Figure 1 to answer the following questions.

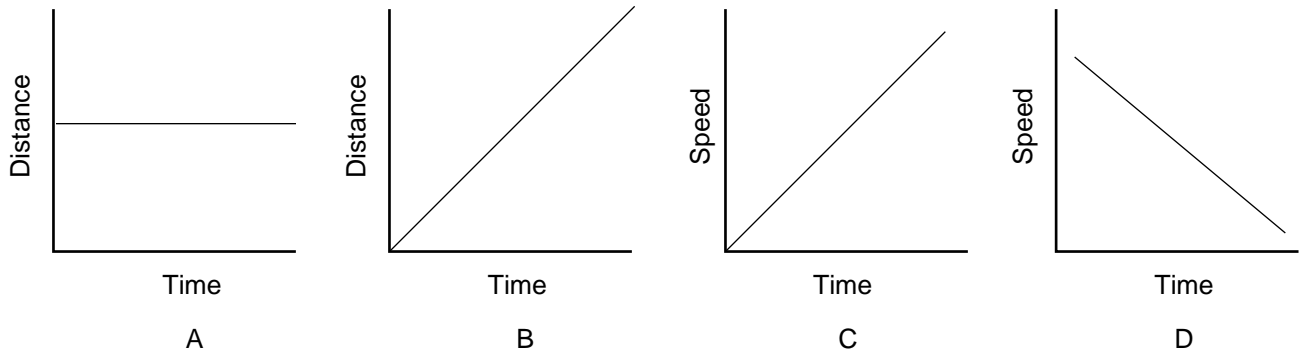


FIGURE 1

17. Which of the graphs shown in Figure 1 represents a car speeding up? _____
18. Which of the graphs shown in Figure 1 represents a car standing still? _____
19. Which of the graphs shown in Figure 1 represents a car slowing down? _____
20. Which of the graphs shown in Figure 1 represents a car moving at a constant speed? _____

IV. EYV Review

21. **History Connection: History of Time** What are the disadvantages of water and sand clocks?
