



- (a) not moving
 (b) moving away from sensor speeding up
 (c) moving away from sensor slowing down
 (d) moving away from sensor at constant speed
 (e) moving toward the sensor speeding up
 (f) moving toward the sensor slowing down
 (g) moving toward the sensor at constant speed

In the following 10 questions, choose the correct answer from the 7 choices above and darken in the correct answer. (2 points each)

1. In segment 1, you are: (b) (c) (d) (e) (f) (g)
2. In segment 2, you are: (a) (b) (c) (d) (f) (g)
3. In segment 3, you are: (a) (b) (c) (d) (f) (g)
4. In segment 4, you are: (a) (b) (c) (d) (e) (f)
5. In segment 5, you are: (a) (b) (c) (d) (e) (g)
6. In segment 6, you are: (a) (c) (d) (e) (f) (g)
7. In segment 7, you are: (a) (b) (c) (e) (f) (g)
8. In segment 8, you are: (a) (b) (d) (e) (f) (g)
9. In segment 9, you are: (b) (c) (d) (e) (f) (g)
10. In segment 10, you are: (a) (b) (c) (d) (f) (g)

Darken in the correct answer.

11. Assume you started from some point, where did you end up? (2 points)

- (a) At the position where you started?
 Closer to the sensor than where you started?
 (c) Further away from the sensor than where you started?

12. Coming to school this morning, a car drew opposite your instructors car. It took 12 seconds for the car to reach a bridge further down the road. It took your instructor 21 seconds to reach the same bridge. Your instructor glanced down and saw that he was traveling at 63 miles per hour. How fast was the other car going? Show your work. (3)

$$\textcircled{3} \quad 63 \frac{\text{mi}}{\text{hr}} \times \frac{21 \text{ sec}}{12 \text{ sec}} = 110.25 \frac{\text{mi}}{\text{hr}}$$

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