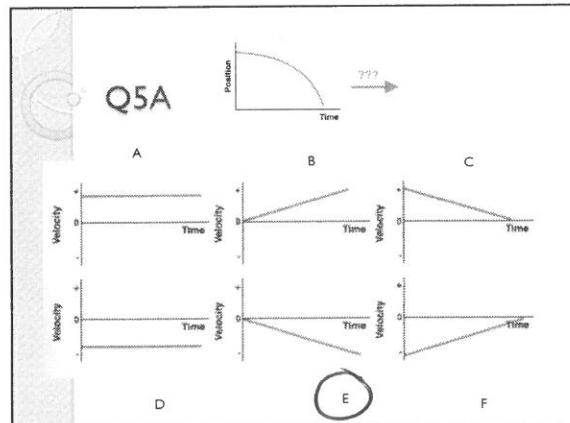
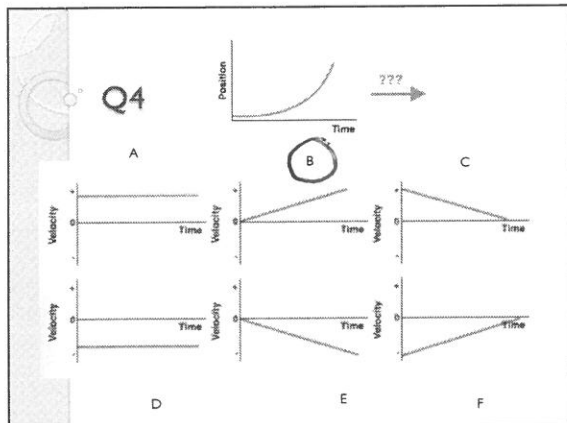
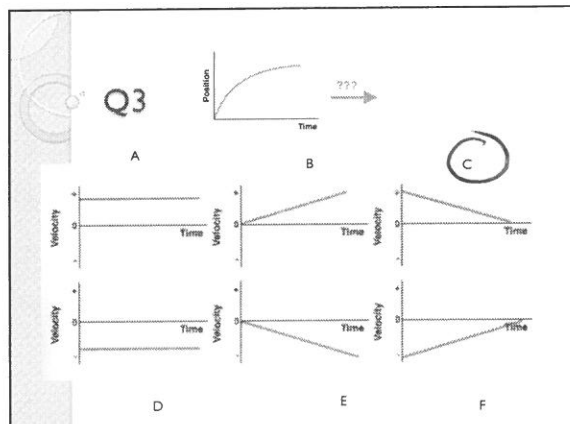
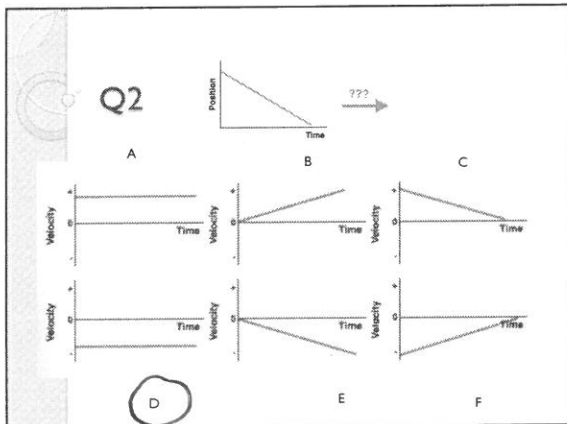
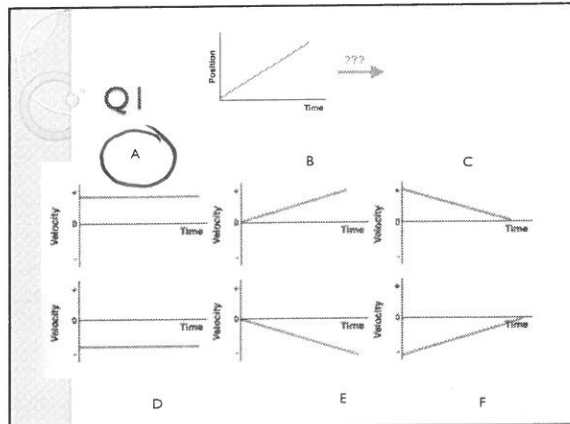


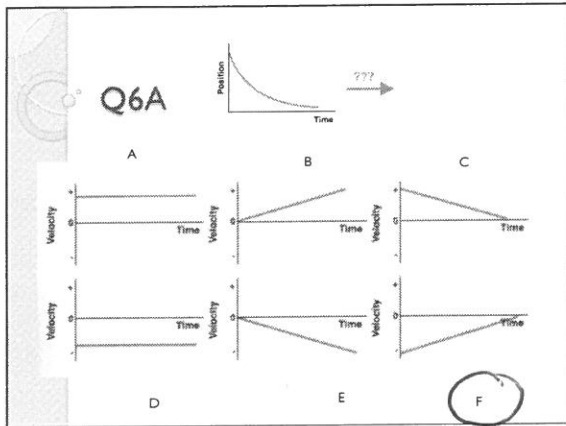
KEY

11/4/19

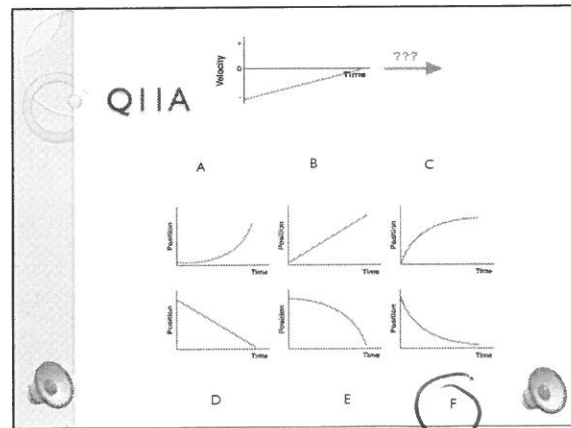
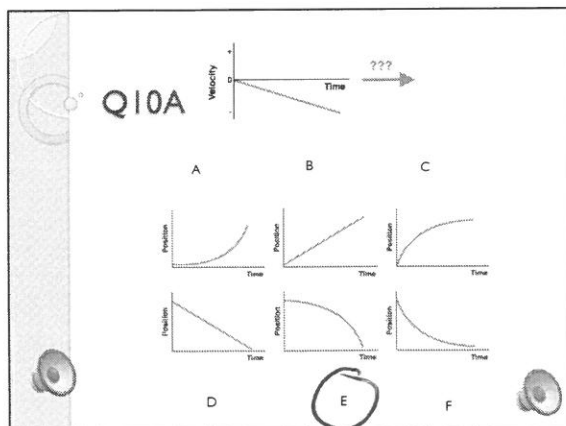
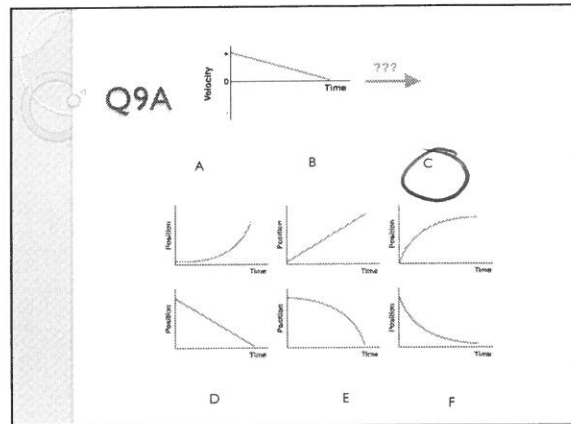
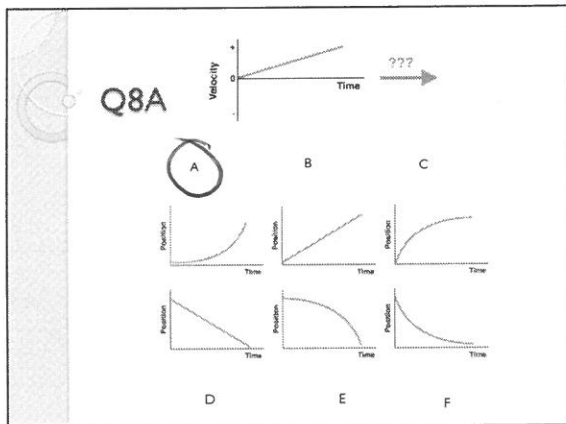
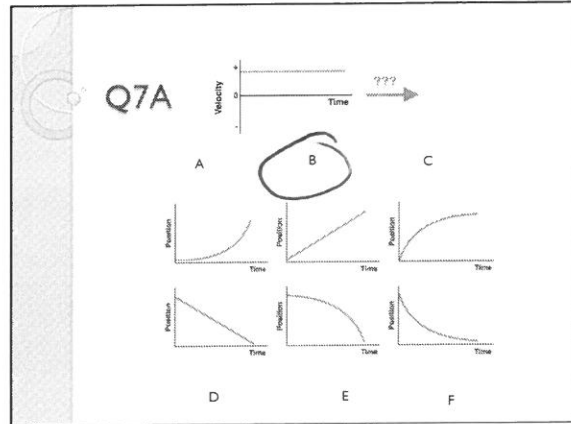
Motion Test Version 2

1. Have you bubbled in your student ID?
2. Have you bubbled your Version number?
3. Have you written your name and NUMBER on the right hand corner?
4. Do you have your journal and a pencil?
5. Is your desk clear of any other materials besides this laptop?





F
A&B



Q12A

A B C

D E F

Position-time graphs questions: True or False

F 13. Position-time graphs cannot be used to represent the motion of objects with accelerated motion.

F 14. The slope on a position-time graph is representative of the **acceleration** of the object.

T 15. A straight, diagonal line on a position-time graph is representative of an object with a constant velocity.

F 16. If an object is at rest, then the position-time graph will always be a horizontal line located at zero, along the time axis.

T 17. Accelerated objects are represented on position-time graphs by curved lines.

T 18. An object with a positive velocity will be represented on a position-time graph by a line with a positive slope.

F 19. An object with a slower velocity will be represented on a position-time graph by a line with a negative slope.

Acceleration Questions: True or False

F 20. Accelerating objects **MUST** be changing their velocity.

T 21. An object which is slowing down has an acceleration.

T 22. An object which is moving at constant speed in a circle has an acceleration.

T 23. An object that is positively accelerating will eventually (if given enough time) be moving fast.

F 24. An object that is moving towards the right must have an acceleration that is directed toward the right.

Consider the dot diagrams for Objects A, B, and C. The arrow represents the direction of motion. Match the motion of Objects A, B, and C to one of the lines on the graph.

A B C

25. A group of students experimented and produced this graph from moving themselves in front of a motion detector. Which statement describes how they moved to create this velocity-time graph?

a. They moved slowly; then changed directions and moved fast.

b. They moved away from the detector slowly at a constant speed; then they moved much faster in the same direction.

c. They moved away from the detector slowly at a constant speed; then they moved much faster, but in a different direction than before.

d. Starting from rest, they moved away from the detector while speeding up; they then continued speeding up but at a more rapid rate.

29. Which statement below describes the line on a velocity-time graph for any object that is slowing down?

a. The line is diagonal and sloping downward.

b. The line is diagonal and located in the negative (-) velocity region.

c. The line is diagonal and sloping downward and located in the negative (-) velocity region.

d. The line is diagonal and in either + or - velocity region, but sloping towards the time axis.

