

Section E: Kinematic Graphs 2
Unit: One-Dimension Kinematics
Level 2

Objectives:

Connect kinematic graphs related to the following types of motion

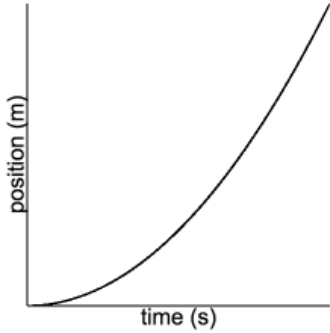
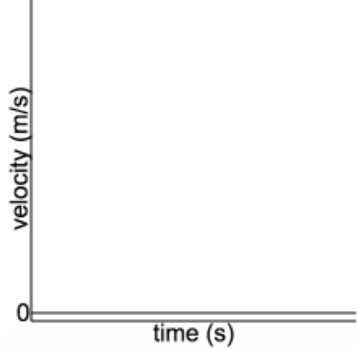
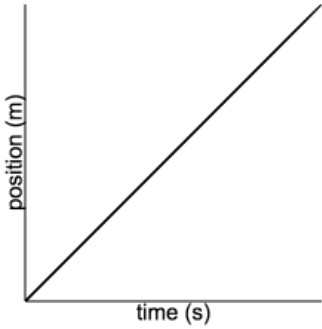
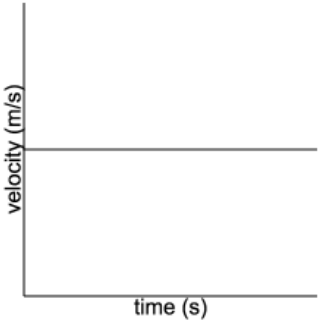
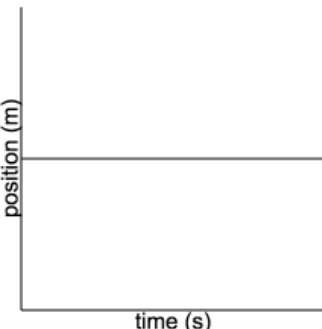
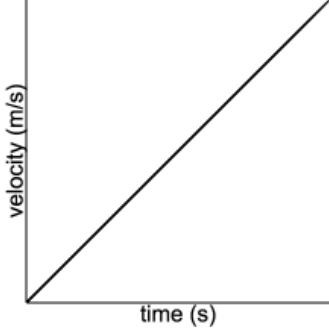
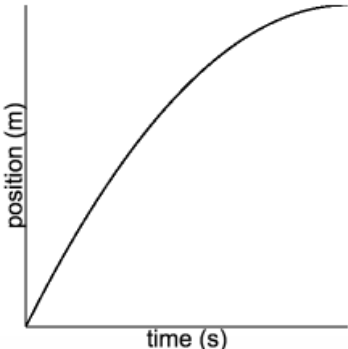
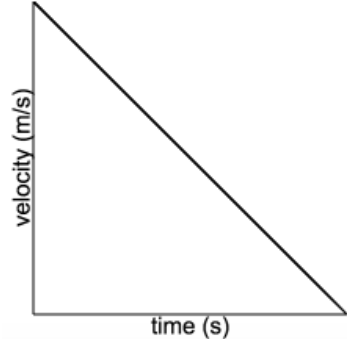
1. constant velocity motion
2. not moving
3. positive acceleration motion (speeding up)
4. negative acceleration motion (slowing down)

Unlike the previous quiz, which was entirely multiple choice, this quiz will require you to select *position*, *velocity*, and *acceleration* graphs that are related to each other.

5 - 8

POSITION-TIME graphs and VELOCITY-TIME graphs represent the same motion in different ways.

Connect the POSTION-TIME Graph to the VELOCITY-TIME graph that describes the same motion.

Position-Time Graph	Velocity-Time Graph
	
	
	
	

For each of the following situations, draw both the *position-time* and *velocity-time* graphs. Make sure that you *label the axes* on every graph!

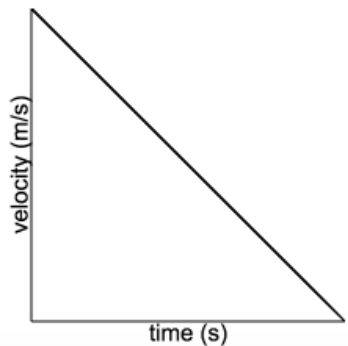
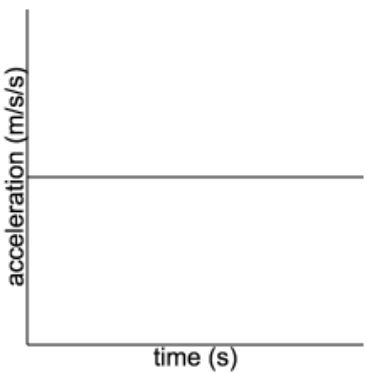
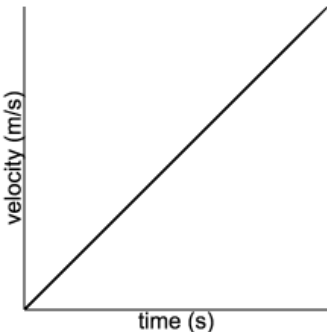
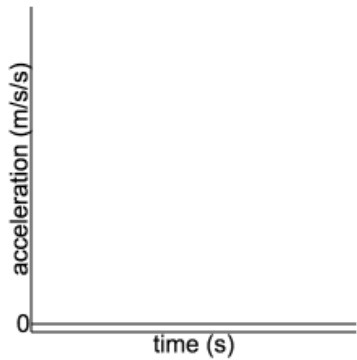
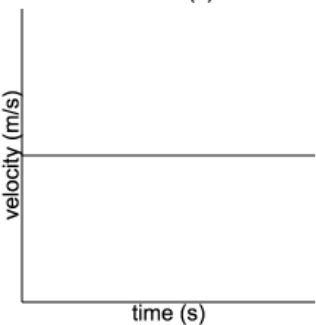
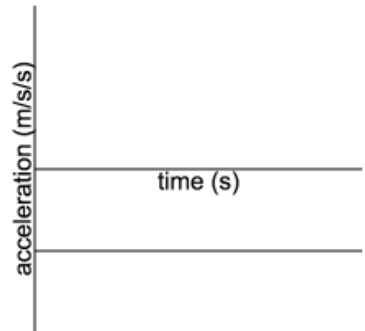
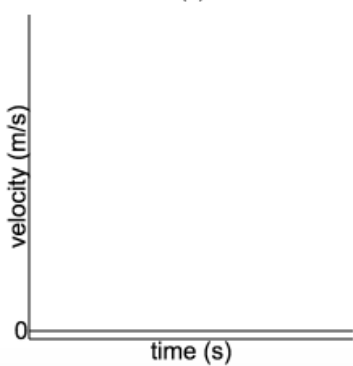
9. A car driving at a constant velocity.

10. A parked car.

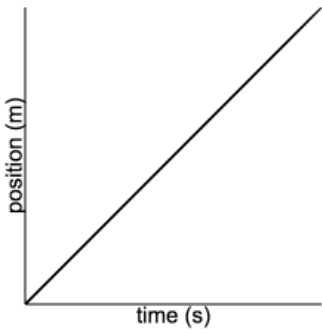
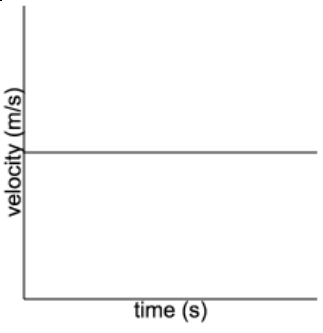
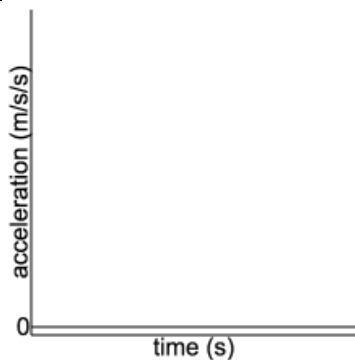
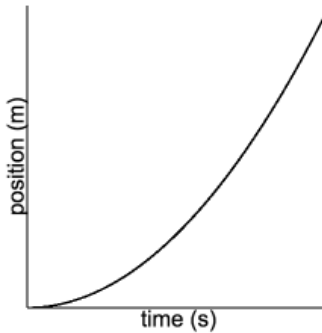
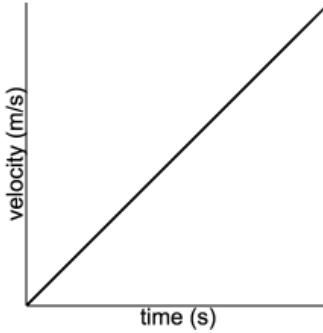
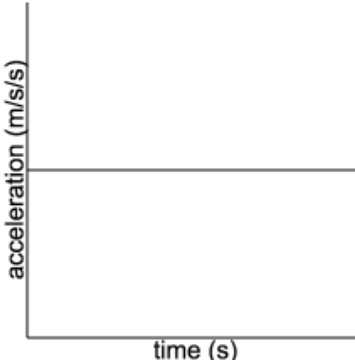
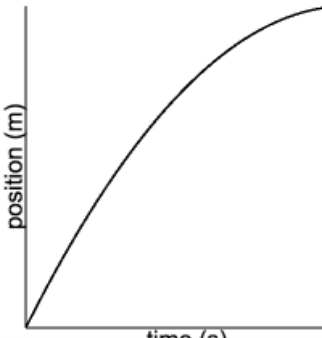
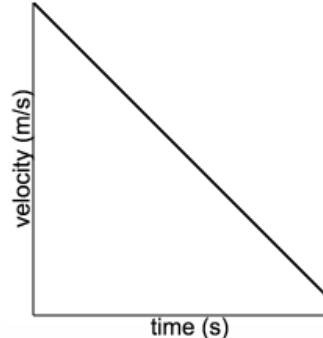
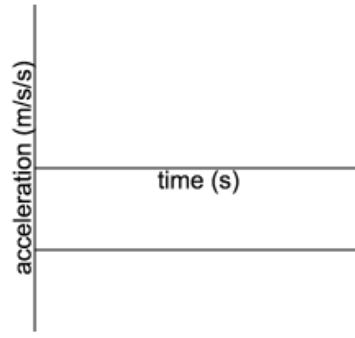
11. A car....the driver is pressing the accelerator!

12. A car...the driver is pressing the brake!

5 – 9 Connect each velocity-time graph to the corresponding acceleration-time graph.
 Note that one of the acceleration-time graphs connects to *two* velocity-time graphs.

Velocity-Time Graph	Acceleration-Time Graph
	
	
	
	

Part 5: A reference of all graphs you must memorize:

CONSTANT VELOCITY		
		
POSITIVE ACCELERATION		
		
NEGATIVE ACCELERATION		
		
NOT MOVING		
