

Name: _____ Period: _____ Date: _____

Standards: P.D.01 _____ P.D.02 _____ P.D.03 _____ P.D.04 _____ P.D.05 _____

P.D.06 _____ P.D.07 _____ P.D.14 _____ P.D.15 _____ P.D.17 _____ P.D.19 _____

G.D.67 _____

Unit 1 Test

1. Draw a position vs. time graph where the distance and displacement are the same. P.D.01

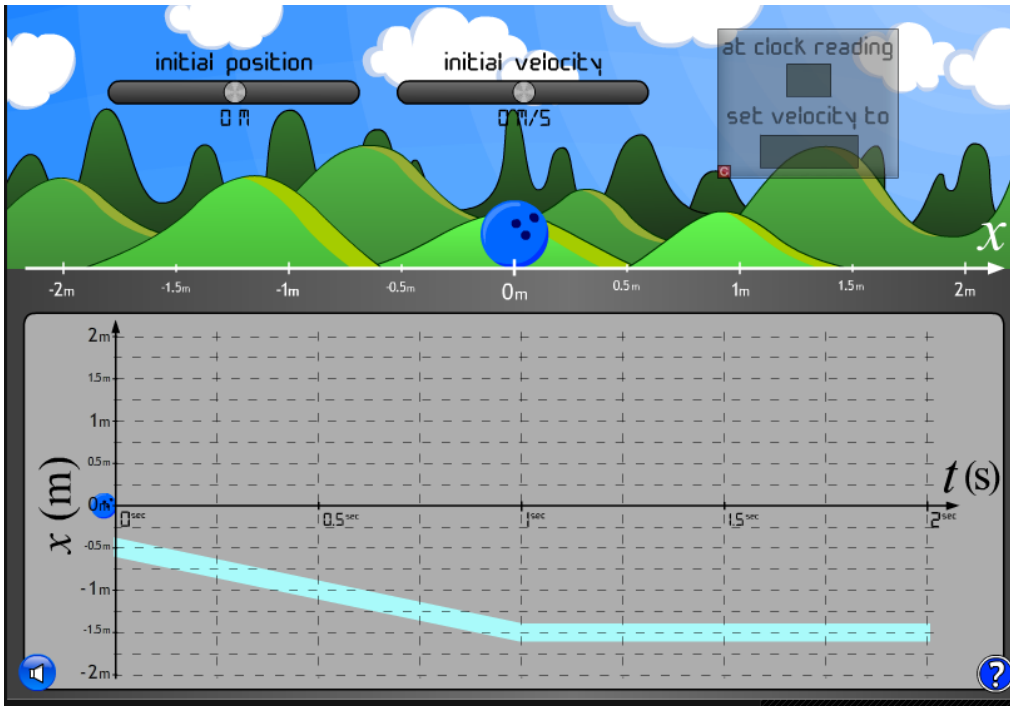
2. Draw a position vs. time graph where the distance and displacement are **different**. P.D.01

P.D.01	
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3. What values will make the graph below work? Fill in the blanks. P.D.02

Initial Position: _____ At Clock Reading: _____

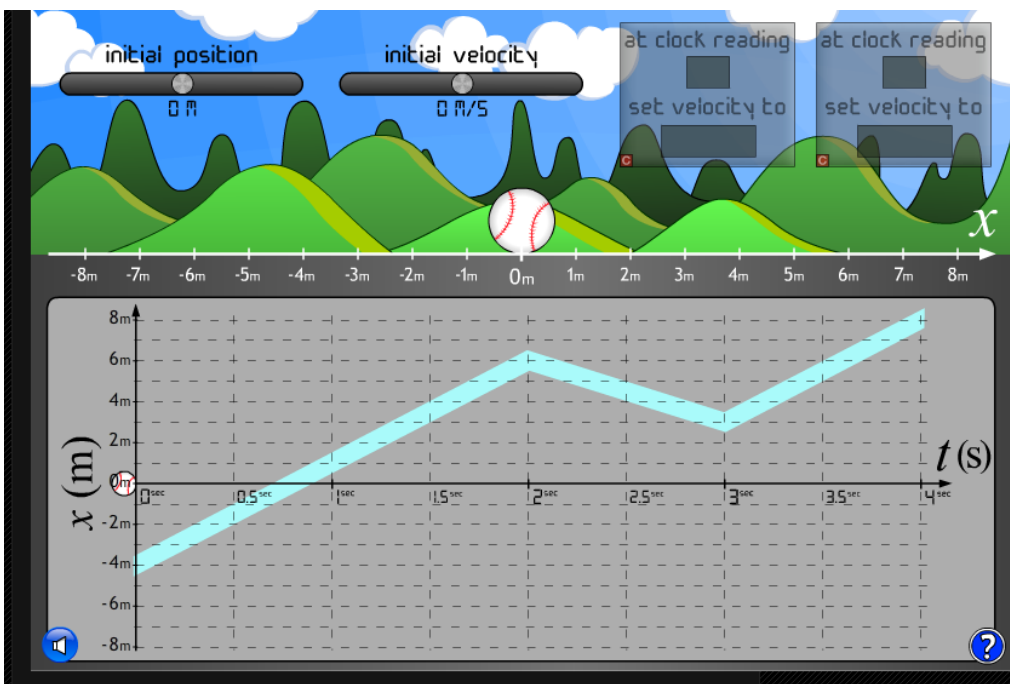
Initial Velocity: _____ Set Velocity to: _____



4. What values will make the graph below work? Fill in the blanks. P.D.02

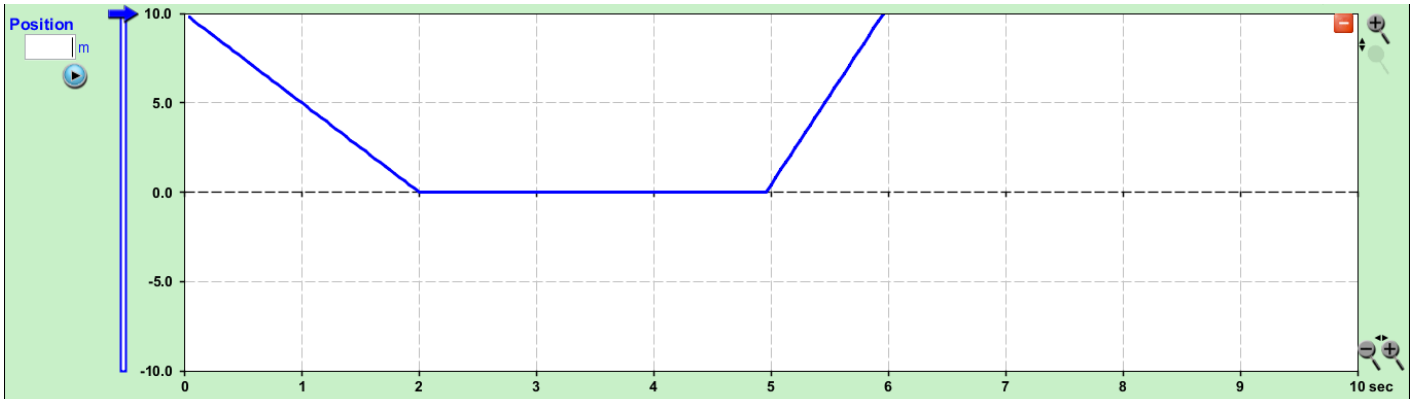
Initial Position: _____ At Clock Reading: _____ At Clock Reading: _____

Initial Velocity: _____ Set Velocity to: _____ Set Velocity to: _____



P.D.02	
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5. For the position vs. time graph below: P.D.03



Draw the corresponding velocity vs time graph below.

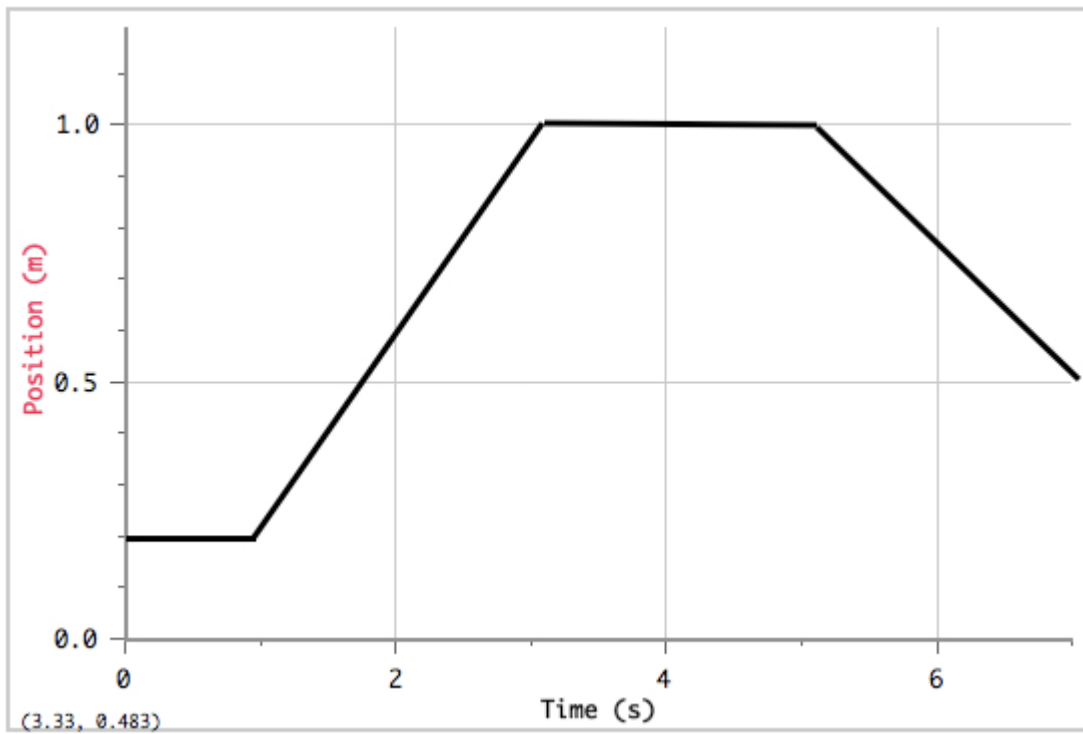
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In words, describe the motion of the object.

6. For following written description, draw the corresponding position vs. time and velocity vs. time graphs: P.D.03
An object stays at rest at the position of 5 meters for 4 seconds. It then travels with a velocity of -10 m/s for 15 seconds.

position vs. time	velocity vs. time

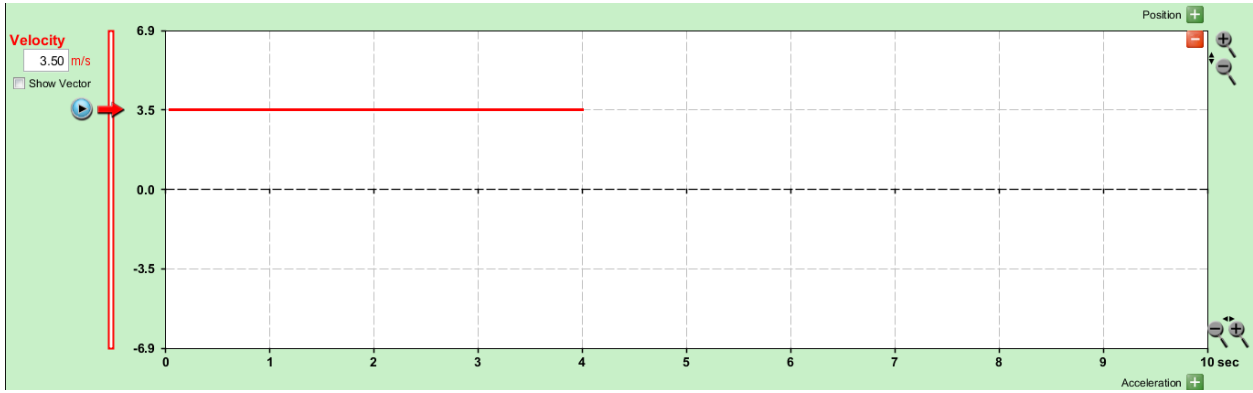
P.D.03	
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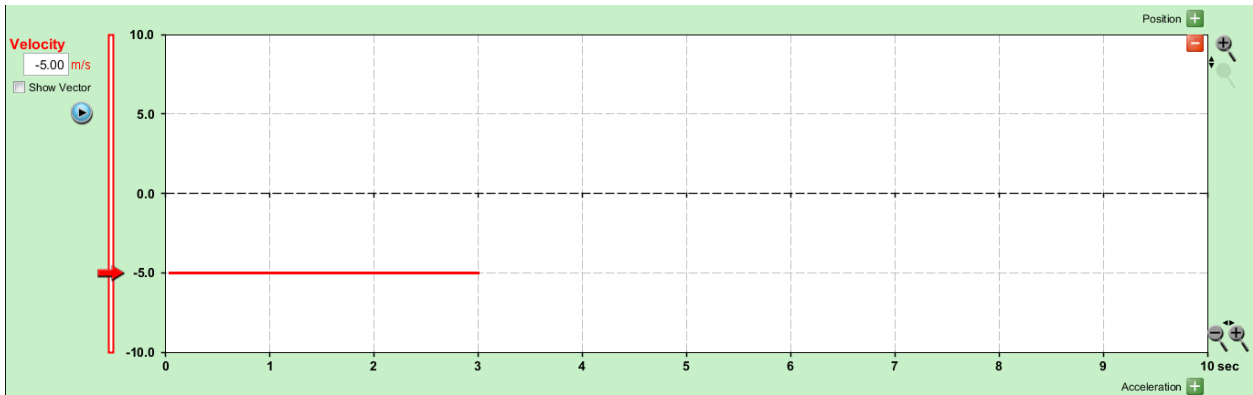
7. For the graph above, determine the velocity of the object between 1-3 seconds. P.D.04
SHOW ALL OF YOUR WORK FOR FULL CREDIT.

8. For the graph above, determine the velocity of the object between 5-7 seconds. P.D.04
SHOW ALL OF YOUR WORK FOR FULL CREDIT.

P.D.04	
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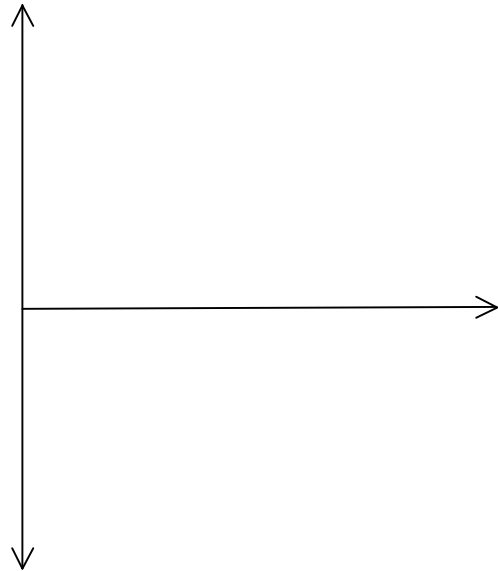
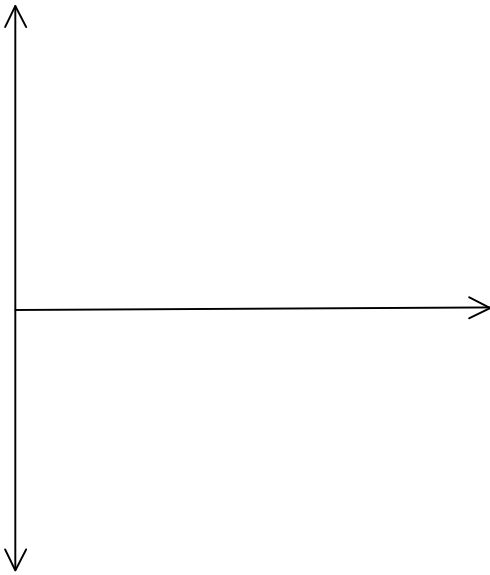
9. Based on the v vs t graph above, what is the final position of the moving man? P.D.05



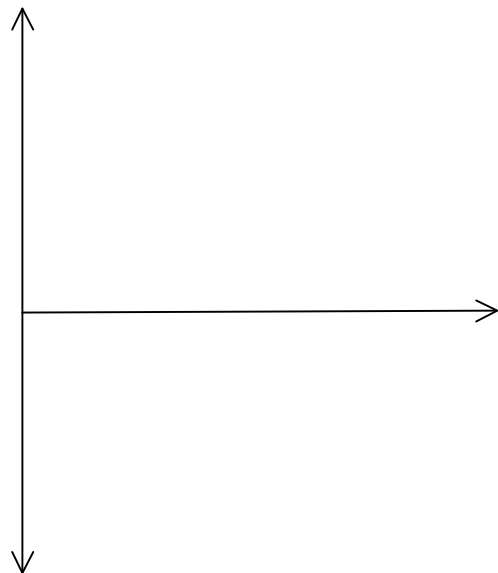
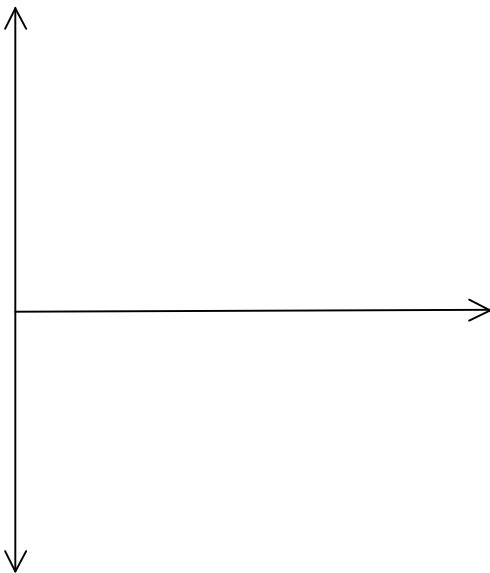
10. Based on the v vs t graph above, what is the final position of the moving man? P.D.05

P.D.05	
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11. Create a x vs t (position vs time) graph and a v vs t (velocity vs time) graph for an object with an initial position of 6 meters, a final position of 2 meters, and a velocity of -1 meters/second. P.D.06



12. Create a x vs t (position vs time) graph and a v vs t (velocity vs time) graph for an object with an initial position of -8 meters, a final position of 0 meters, and a velocity of 2 meters/second. P.D.06



P.D.06	
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13. A deer runs at a constant velocity of 5 m/s North. How far can the deer run in 15 seconds? Express your final answer in **centimeters**. Show all of your work for full credit. P.D.07, P.G.67

14. A car travels 250 km South on a straight road for 10 hours. What is its velocity? Express your answer in **m/s**. Show all of your work for full credit. P.D.07, P.G.67

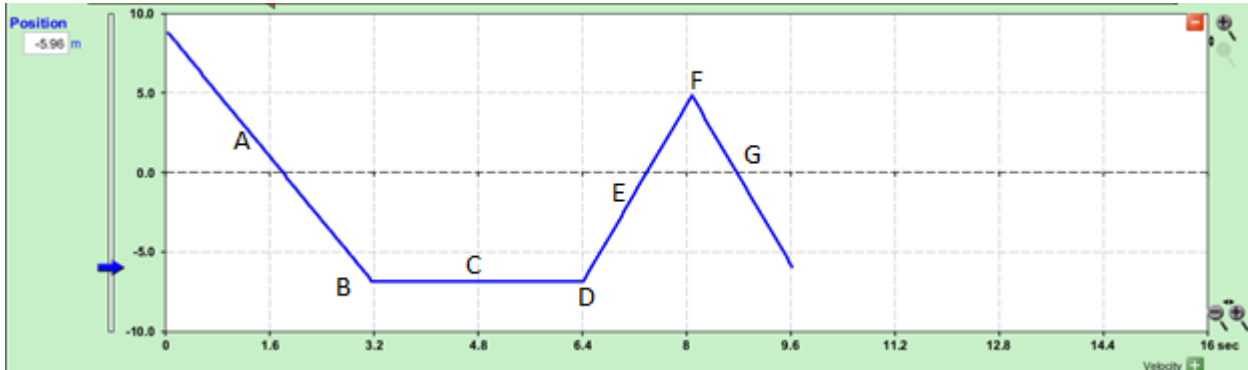
15. In your own words- describe what velocity is **and** give an example: P.D.14

16. In your own word- describe what acceleration is **and** give an example: P.D.14

P.D.07	
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P.G.67	
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D.14	
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17. From the Position vs. Time graph above indicate where the velocity was constant or changing. P.D.15

A: _____

B: _____

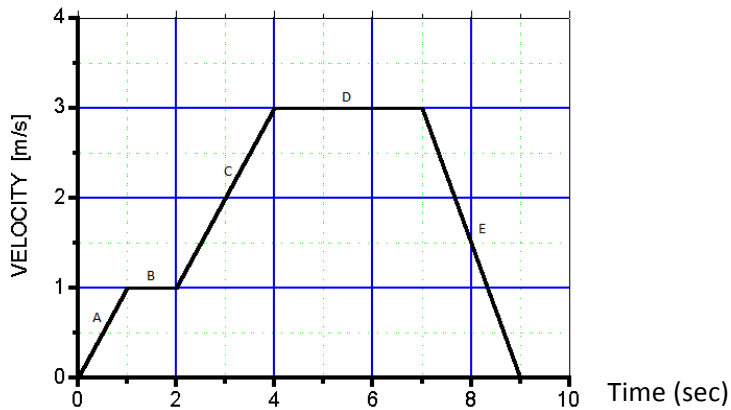
C: _____

D: _____

E: _____

F: _____

G: _____



18. From the Velocity vs. Time graph above indicate where the acceleration was positive, negative, or zero. P.D.17

A: _____

B: _____

C: _____

D: _____

E: _____

P.D.15	
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P.D.17	
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19. Jeremy is riding his bike down a straight road at 3 m/s when he accelerates at a constant rate for 5 seconds until he reaches a velocity of 6 m/s. What is his acceleration? Show all of your work for full credit. P.D.19

20. A car moving at 18 m/s accelerates at -2.5 m/s^2 as it approaches a stop sign. How long does it take the car to come to a complete stop? Show all of your work for full credit. P.D.19

P.D.19	
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