

### Speed, Velocity and Acceleration Homework

1. If Chris throws the baseball 60 meters in 4 seconds, what is the average speed of the football?

Show your work

Answer

Units

2. An airplane travels 4000m in 16 seconds on a heading of 35°. What is its velocity?

Show your work

Answer

Units

Direction

3. A bicycle is heading West. It goes 5000m in 500s. What is its velocity?

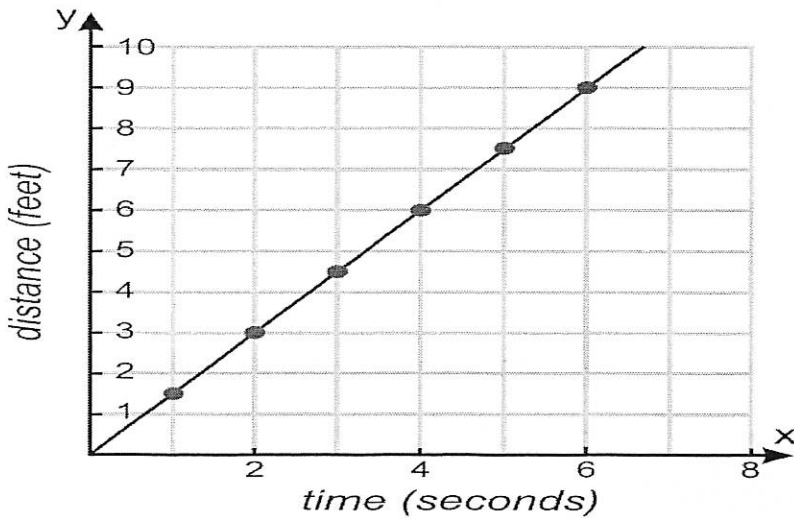
Show your work

Answer

Units

Direction

4. Calculate the speed of the line?



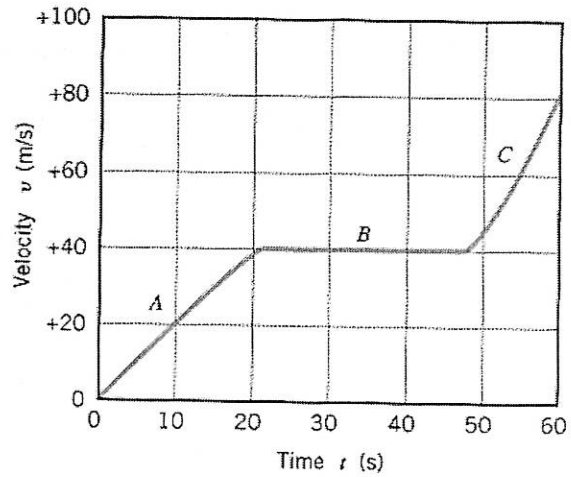
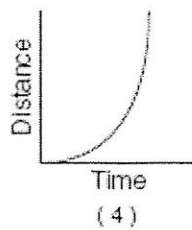
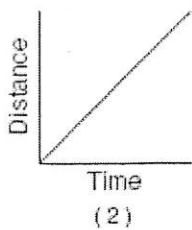
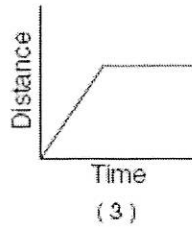
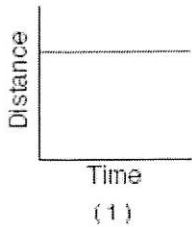
				.		
0	0	0	0		0	0
1	1	1	1		1	1
2	2	2	2		2	2
3	3	3	3		3	3
4	4	4	4		4	4
5	5	5	5		5	5
6	6	6	6		6	6
7	7	7	7		7	7
8	8	8	8		8	8
9	9	9	9		9	9

5. Draw a distance-time graph for each of the following situations.

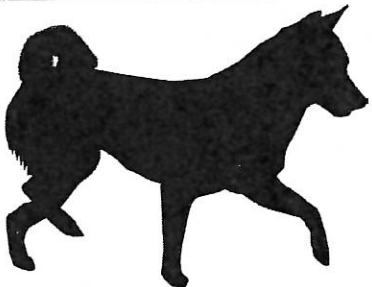
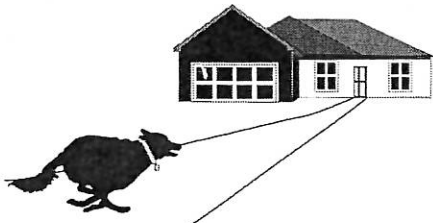

<p>a) A person who is stopped.</p> <div style="text-align: center; margin-top: 20px;"> </div>	<p>b) A person walking away from the motion detector at a constant speed.</p> <div style="text-align: center; margin-top: 20px;"> </div>
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Match up graphs 1-4 with the correct description of the motion of the object for section one, and then use the section two graph to complete questions 5-7.

Graph 5



6. \_\_\_\_\_ Object is staying in the same place.
7. \_\_\_\_\_ Object is moving at a constant velocity
8. \_\_\_\_\_ Object is accelerating.
9. \_\_\_\_\_ Object is moving at a constant velocity and then stops/stays in the same place.

 <p>A dog is walking 5 meters per minute.</p>	 <p>A dog is running 18 meters per minute south toward a house.</p>	 <p>An elevator slows to a stop.</p>
10.	11.	12.