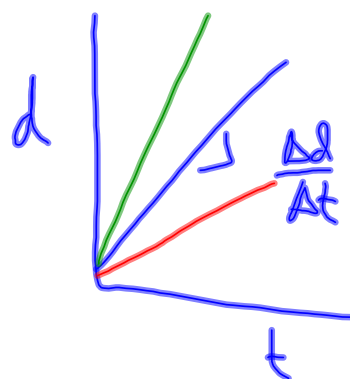
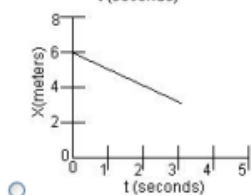
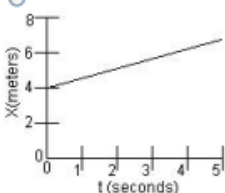
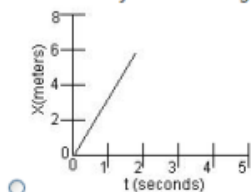


7. Question Details

206 after Cis1&2 -see class notes [121634]

Below are 5 graphs showing the position of an object at x versus time. x is positive to the right. Which of these graphs represents the object with the greatest velocity toward the right?



Responses - Microsoft Internet Explorer provided by Harvard Public School System

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Responses

14. CPO-PFC1 2.P.09. [550958] 1.28/3.84 points Show Details All Responses

During a science experiment, your teacher drops a tennis ball out of a window. The ball hits the ground 2.2 seconds later.

(a) What was the ball's speed when it hit the ground? Ignore air resistance.
 10.8 ✗ 21.6 m/sec

(b) What was the ball's average speed during the 2.2 seconds?
 5.4 ✗ 10.8 m/sec

(c) How high was the window?
 23.74 ✓ 23.7 m

$a = g = -9.81 \text{ m/s}^2$

$$\frac{(21.6 \frac{\text{m}}{\text{s}} + 0)}{2} = (10.8 \text{ m/s})(2.2)$$

↑ V_{avg}

15. CPO-PFC1 2.RC.06. [550961] 3.84/3.84 points Show Details All Responses

If an object has an acceleration of 31 cm/sec², what do you know about how its speed changes over time?

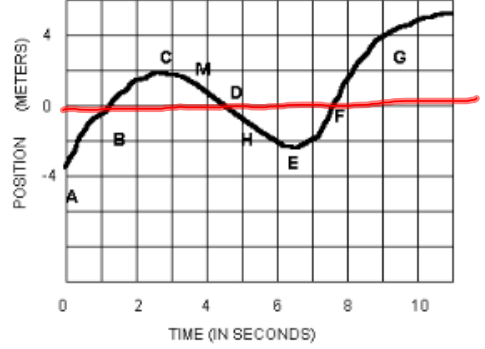
Its speed changes by 124 centimeters per second each

Internet 100%

8. Question Details

Acoustics D02-2 [68371]

The graph shows the position of an object versus time. The positive position numbers indicate the location to the right of the zero of the coordinate system. Keep in mind the activity with the motion detector in class.



- a) At what letter (be sure to use capital letters) is the velocity a maximum?
- b) Nearest what letter is the velocity zero for the first time?
- c) Nearest what letter is the velocity zero for the second time?
- d) Of the following letters (A,B,D,E,F) nearest what letter is the speed toward the left greatest?
- e) What is the value of the average speed between 7 and 9 seconds?
 m/s

POD 5 - Microsoft Internet Explorer provided by Harvard Public School System

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POD 5

Position (km east)

Time, Hours

What is the velocity of object B?
 (No Response) km/hr east

What is the speed of object B?
 (No Response) km/hr

At what time will object B reach the origin?
 (No Response) hours

If object B continues with this motion, what will be its position at time t = 61 hours?
 (No Response) km east

$y = mx + b$
 ↑ slope
 y intercept @ x=0

$b = 80$

$$\text{Slope} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{40 - 80}{6 - 0} = \frac{-40}{6}$$

$$= -6.6\bar{6} \frac{\text{km}}{\text{hr}}$$

Internet 100%

$$y = mx + b$$

$$d = -6.66t + 80$$

$$\begin{array}{r} -381 = -6.66t + 80 \\ -80 \qquad \qquad \qquad -80 \\ \hline \end{array}$$

$$\begin{array}{r} -461 = -6.66t \\ \underline{-6.66} \quad \underline{-6.66} \end{array} \quad t = 69.21 \text{ hrs}$$