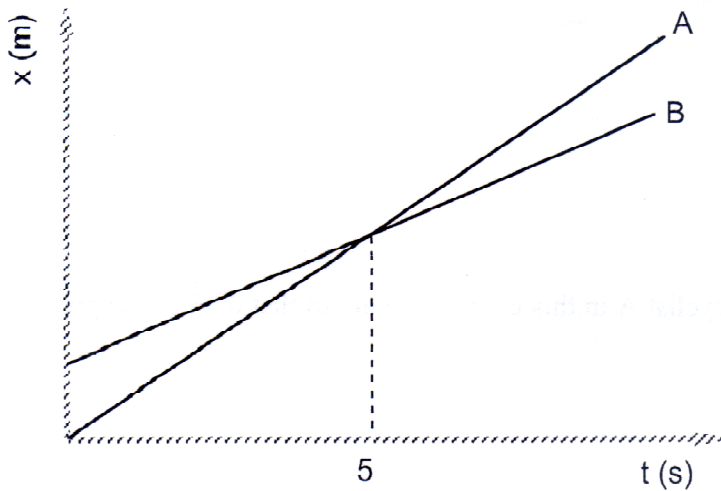


UNIT II Worksheet 1

1. Consider the position vs. time graph below for cyclists A and B.



- a. Do the cyclists start at the same point? How do you know? If not, which is ahead?

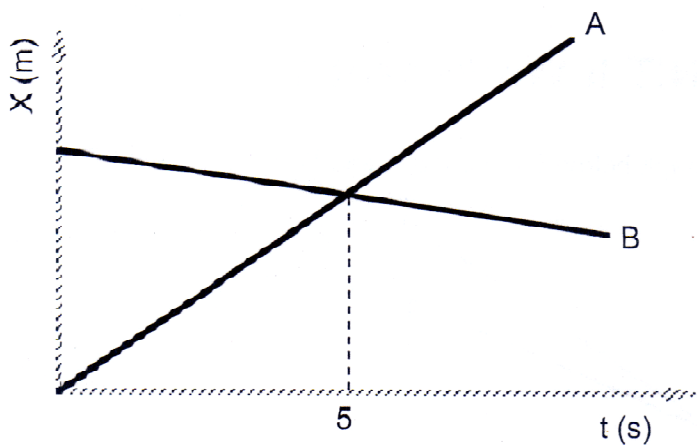
- b. At $t = 7$ s, which cyclist is ahead? How do you know?

- c. Which cyclist is travelling faster at $t = 3$ s? How do you know?

- d. Are their velocities equal at any time? How do you know?

- e. What is happening at the intersection of lines A and B?

2. Consider the position vs. time graph below for cyclists A and B.



- How does the motion of the cyclist A in this graph compare to that of A in the previous graph on page one?
- How does the motion of cyclist B in this graph compare to that of B in the previous graph on page one?
- Which cyclist has the greater speed? How do you know?
- Describe what is happening at the intersection of lines A and B.
- Which cyclist traveled a greater distance during the first 5 seconds? How do you know?