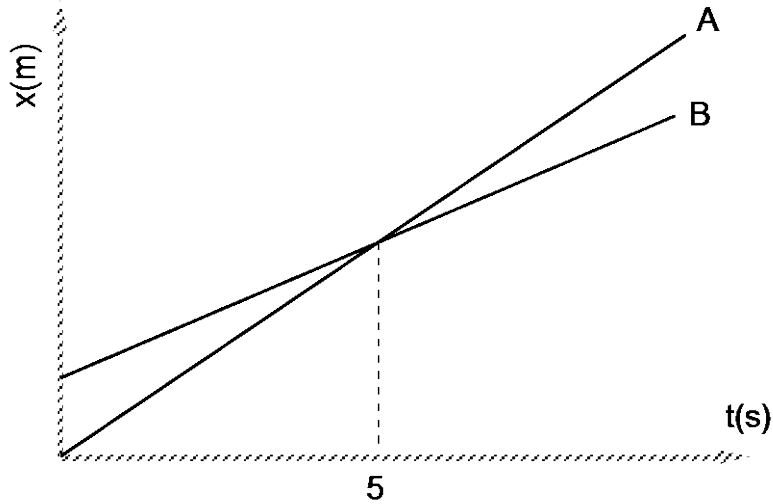


Unit 2 – Describing Motion

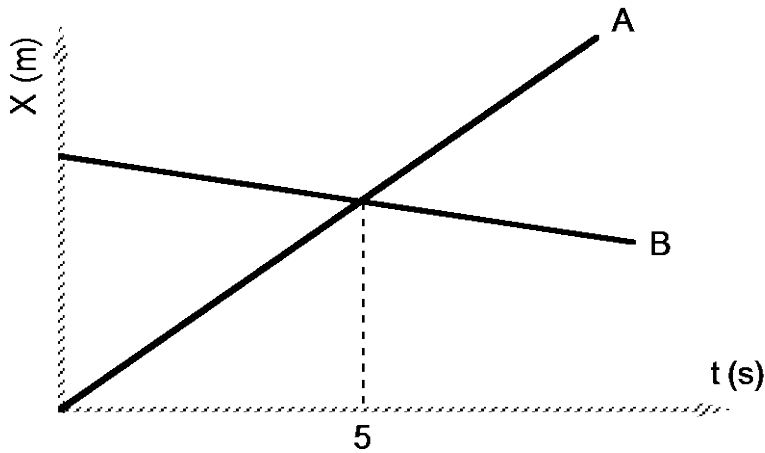
Exercise 1 – Constant Velocity

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 3s? 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.



- a. How does the motion of the cyclist A in this graph compare to that of A in the previous graph from question 1?
- b. How does the motion of cyclist B in this graph compare to that of B in the previous graph from question 1?
- c. Which cyclist has the greater velocity? How do you know?
- d. Describe what is happening at the intersection of lines A and B.
- e. Which cyclist has traveled further during the first 5 seconds? How do you know?