



Assignment 6: KINEMATICS  
1-D Motion CONT

- 4 Two railroad tracks intersect at right angles at station O. At 10AM the train A, moving west with constant speed of 50 km/h, leaves the station O. One hour later train B, moving south with the constant speed of 60 km/h, passes through the station O. Find minimum distance between these trains. :

- 5 John who is member of NGO missed the meeting of his protest group at the refinery and now needs to get to the oil rig in the shortest time to join the demonstrators trying to disrupt the work of the petroleum company. John can run at 10km/h but can paddle only 3km/h.
- a) How far from the Refinery should John enter the water
- b) What is the minimum time it will take to get to the oil rig?
- $L=12\text{km}$ ,  $d=4\text{km}$

