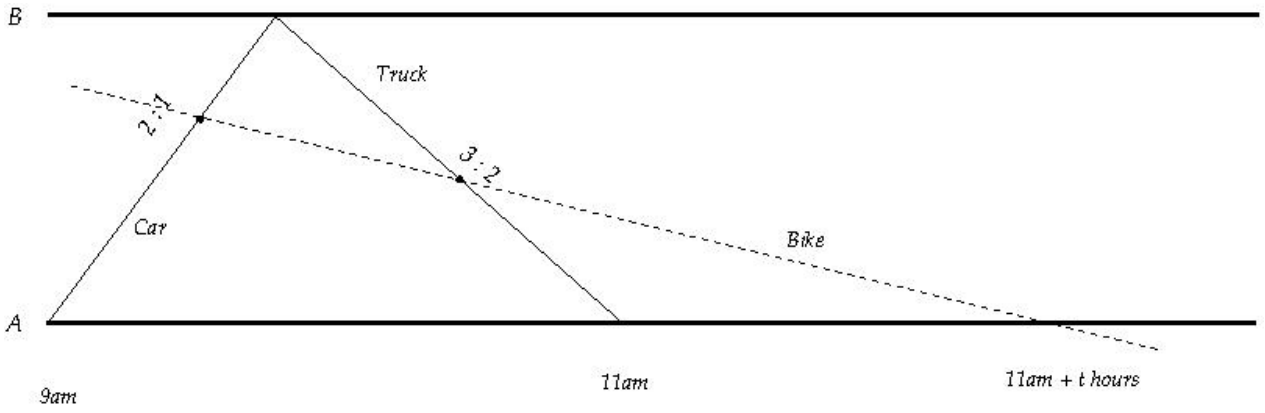
A car, a bike and a truck

At 9 am, a car drives from A to B. At two-thirds of the way, it passes a bicycle proceeding in the opposite direction. As soon as the car arrives at B, a truck leaves B towards A, passing the bicycle three-fifths of the way from B to A, and arrives at A at 11 am. Each vehicle travels at its own constant speed. When does the bicycle reach A?



Hints: How does the picture represent the problem? What theorem do you know that says something about this figure?