



SNS academy

**an International CBSE Finger Print School
Coimbatore**



PUZZLE

TIME AND MOTION

Alice and Bob – Travel and Meeting Analysis

Alice and Bob live in different cities, 120 miles apart. They decide to meet for lunch at a restaurant located exactly halfway between their cities. Alice drives at a constant speed of 60 miles per hour. Bob, eager to arrive early, drives at a constant speed of 80 miles per hour.

Alice leaves her house at 11:00 AM. Bob leaves his house at 10:45 AM.

Questions:

1. Who arrives at the restaurant first, Alice or Bob?
2. How long does Alice take to reach the restaurant?
3. How long does Bob take to reach the restaurant?
4. How long does the person who arrives first have to wait for the other person?
5. If Bob wants to arrive at the restaurant at the same time as Alice, at what time should he leave his house?