Skill Set 13 – Overtaking (Speed)

Benjamin and Jason started their journey from the same starting point towards the company headquarters at 10 am. Benjamin was traveling at a speed of 70 km/h while Jason was traveling at a speed of 100 km/h. When Jason reached his destination, Benjamin was still 150 km away.

Find

(a): the time when Jason reached his destination.

(b): the distance from the starting point to the destination.

Starting point 10am
Benjamin 70 km/h
Jason   100 km/h

Company HQ

(a): Speed difference between Jason and Benjamin = 100 – 70 = 30 km/h

Jason was 150 km ahead when he reached the company HQ

Time taken for Jason to reach HQ = 150 ÷ 30 = 5 hr (Jason traveled 30 km more than Benjamin every hour

10:00 + 5:00 = 15:00hr = **3pm**

Jason reached his destination at **3 pm**.

(b): Distance from the starting point to the destination = 5 x 100 = **500 km**

The distance from the starting point to the destination is **500 km**.