

There are 2 planes that leaves towards the same city at the same time (15:32pm) one flies at 460km/h and the other flies at 600km/h. how long will it take the faster plane to get 300 km ahead of the slower plane.

$$V = \frac{S}{t} \Rightarrow S = V * t$$

$$V_1 = 600km/h$$

$$S_1 = 600 * t$$

$$V_2 = 460km/h$$

$$S_2 = 460 * t$$

$$S_1 - S_2 = 300$$

$$600t - 460t = 300$$

$$140t = 300$$

$$t = \frac{300}{140} = 2.14h$$

$$\underline{t = 2.14 h = 2 h 8 min 24 sec}$$