Answer on question 40383 – Math – Algebra

A man completed a trip of 136 km in 8 hrs. Some part of the trip was covered at 15 km/hr. What is the part of the trip covered at 18 km/hr?

Solution

Let the first part of the trip will be x km. Then the second part of the trip is 136-x km .We obtain the equation

$$\frac{x}{15} + \frac{136 - x}{18} = 8$$

Where $\frac{x}{15}$ is the time for covering the first part of trip and $\frac{136-x}{18}$ is the time for covering the second part of trip. We need to solve this equation

$$\frac{6x + 680 - 5x}{90} = 8$$

$$x = 40,$$

the part of the trip covered at 18 km/hr is 136-40=96 km.

Answer: 96 km.