

**Answer on Question #66692-Physics-Other**

A hiker south along a straight path for 1.5 h with an average velocity of 0.75 km/h, then travels south for 2.5 h with an average velocity of 0.90 km/h. What is the hiker's displacement for the total trip?

**Solution**

The hiker's displacement for the total trip is

$$D = d_1 + d_2 = v_1 t_1 + v_2 t_2 = (0.75)(1.5) + (0.9)(2.5) = 3.4 \text{ km.}$$

**Answer: 3.4 km.**

Answer provided by <https://www.AssignmentExpert.com>