**Answer on Question #47447, Physics, Other**

A tortoise walks 19.7m East in 34s, then turns and walks 59.1m North in 96s. What is the total displacement the turtle walked?

Solution

We will use Pythagorean theorem to find total displacement:

$$s = \sqrt{s_e^2 + s_n^2} = \sqrt{19.7^2 + 59.1^2} \approx 62.3\,m$$