

Answer on Question #47448, Physics, Other

What is the displacement of an object that traveled 10 m East and then 22.1 m north?

Solution

We will use Pythagorean theorem to find total displacement:

$$s = \sqrt{s_e^2 + s_n^2} = \sqrt{10^2 + 22.1^2} \approx 23.3 \text{ m}$$