

Given the components of velocity $V_x = 10$ m/s and $V_y = 15$ m/s, find the magnitude and the direction of the velocity vector.

- a. Magnitude = 18.03 m/s, direction = 33.7 degrees
- b. Magnitude = 25 m/s, direction = 56.2 degrees
- c. Magnitude = 18.03 m/s, direction = 56.2 degrees
- d. Magnitude = 25 m/s, direction = 33.7 degrees