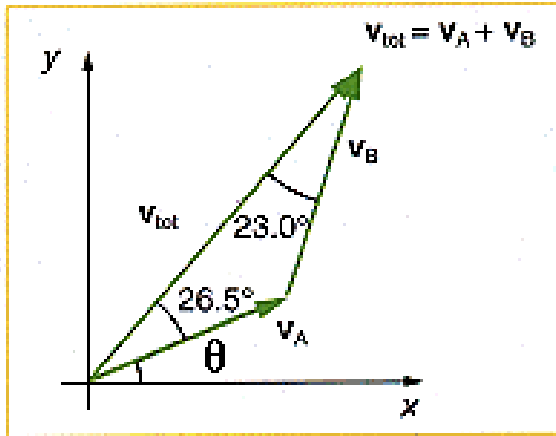


Answer on Question #73273-Physics-Other

Find the magnitudes of velocities v_A and v_B in the figure below, where, $\theta = 23.5^\circ$ and $v_{\text{tot}} = 6.48 \text{ m/s}$.

Solution



We use Sine rule:

$$v_a = 6.48 \frac{\sin(23.0)}{6.48 \sin(180 - 23 - 26.5)} = 3.33 \frac{m}{s}$$

$$v_b = 6.48 \frac{\sin(26.5)}{6.48 \sin(180 - 23 - 26.5)} = 3.80 \frac{m}{s}$$

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