

## Physics: Algebraic Addition of Non-Perpendicular Vectors, Further Practice

- A.  $\mathbf{d}_1 = 83 \text{ m @ } 43^\circ \text{ to the left of vertical (generally upward)}$   
 $\mathbf{d}_2 = 51 \text{ m @ } 20.0^\circ \text{ below horizontal (i.e., to-the-left and DOWN)}$
- B.  $\mathbf{a}_1 = 5.75 \text{ m/s}^2 \text{ @ } 25.0^\circ \text{ above horizontal (generally to the right)}$   
 $\mathbf{a}_2 = 8.11 \text{ m/s}^2 \text{ @ } 60.0^\circ \text{ below horizontal (also, generally to the right)}$
- C.  $\mathbf{v}_1 = 15.1 \text{ m/s @ } 20.0^\circ \text{ W of S}$   
 $\mathbf{v}_2 = 28.5 \text{ m/s @ } 15.0^\circ \text{ N of E}$
- D.  $\mathbf{v}_1 = 12.8 \text{ m/s @ } 25.0^\circ \text{ S of E}$   
 $\mathbf{v}_2 = 25.1 \text{ m/s @ } 15.0^\circ \text{ W of S}$   
 $\mathbf{v}_3 = 38.4 \text{ m/s @ } 20.0^\circ \text{ N of W}$

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