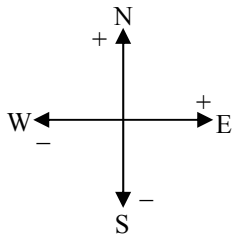
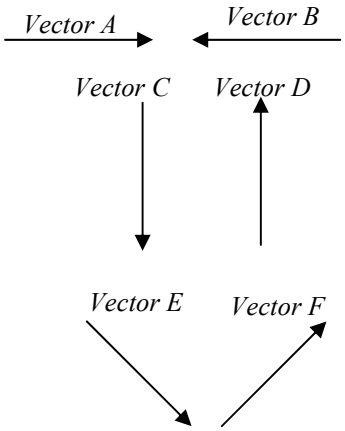
PreAP: due Wed, Sept 14 (Assigned: Mon, Sept 12)
Reg: due Thurs., Sept 15 (Assigned: Tues., Sept 13)

Vectors 2



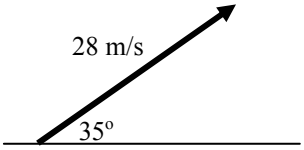
1. Using the vectors at the right add vector A and vector E graphically.



2. Graphically find the resultant of 2B + C.

3. Graphically find the resultant of D – A.

4. Resolve this vector into its components (remember units).



5. A person walks 12 m south, 10 m east, 2 m north, 4 m west, and 4 m east.
   A) Find the x component:
   B) Find the y component:

   C) Draw a large triangle with the components and find the resultant's magnitude and direction.

6. A person walks 42 m west, 10 m south, 22 m east, 30 m north, 5 m west, and 4 m east.
   A) Find the x component:
   B) Find the y component:

   C) Draw a large triangle with the components and find the resultant's magnitude and direction.

7. A car drives 350 m at 60^{o} north of east (up from the x-axis).
   A) Draw the magnitude and direction of this vector.
   B) If it takes the car 15 seconds to drive this distance find how fast they are driving east.

8. Correct or confirm (true or false and why): "A piece of ice on your hand cools down your hand."

9. Why is it warmer upstairs?