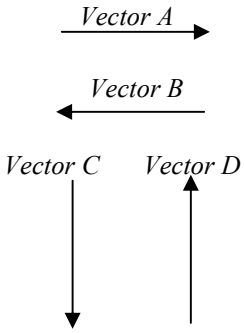
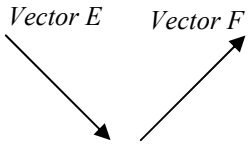
PreAP: due Wed, Sept 14 (Assigned: Mon, Sept 12)
Reg: due Thurs., Sept 15 (Assigned: Tues., Sept 13)

Vectors 1

1. The amount of a vector (how big it is) is called its _____.
2. The magnitude of 45 N at 24^o is _____, the direction is _____.
3. The x and y of a vector you find by using sine or cosine are called the _____.
4. To break a vector into its x and y components is to _____ the vector.
5. The addition of two vectors gives us its _____.
6. Add vector A and vector D graphically.

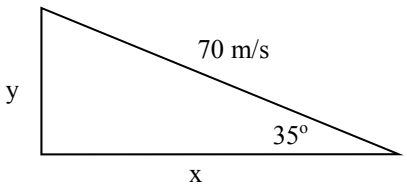


7. Add vector E with vector F graphically.



8. (Using the vectors at the right) Find the resultant of D + 2A.

9. Find the y-component of ***Triangle 1***.
10. Find the x-component of ***Triangle 1***.



Triangle 1

11. A person walks 40 meters south, 10 meters west, 5 meters north, then 2 meters east.
    A) Find their x and y components of their journey.

    B) Draw a large triangle using the information from A).

    C) From the triangle, use trig to find the resultant's magnitude and direction.

12. A person sitting in the sun is experiencing what kind of thermal transfer?
13. The ocean currents spread heat throughout the oceans by what thermal transfer?
14. Touching a hot stove is what kind of thermal transfer?