General Physics REAL LIFE VECTORS
What is your final position relative to the initial position?
What is the Displacement Vector?

ASSIGNMENT INSTRUCTIONS

A. OUTSIDE: Physically measure the displacement of each step using the meter
   stick and protractor. Use a marker for the start and finish locations.

B. OUTSIDE: Measure the overall displacement and angle from the start to
   the finish point.

C. Draw the path of the students on graph paper and attach.
   Label each step & resultant. Clearly indicate your scale. (ie. 1 box = 1 m.)

D. Mathematically calculate the resultant X . vector and Resultant Y-vector.

E. Find the percent error for the x values.   Find the percent error for the y values.

FIELD DIRECTIONS
1. Walk 10 m North
2. Walk 3 m East
3. Walk 3.5 m at 45° North of East
4. Walk 4 m South
5. Walk 7 m at $30.^{\circ}$ West of South

OUTSIDE Results

Length: _____ meters

Direction: _____$^{\circ}$ _____ of _____

R_x_____ R_y _____

Theoretical Calculations

$\sum$ X	$\sum$ Y
1.	
2.	
3.	
4.	
5.	

$R_x =$ $R_y =$

Percent Error = ([Measured Outside – Theoretical] / Theoretical) x100