ADDING VECTORS (H)

Do the work for these problems on a sheet of graph paper. Use a ruler and draw the diagrams carefully. Measure the resultant vectors and label their direction.

You first have to measure each of these ones. Express your answers in (magnitude, angle) format.

You may solve the following problems using one of two methods:
a) Solve by drawing vectors to scale.
b) Solve by using the Pythagorean Theorem. You must still draw a sketch of the problem, but the sketch does not need to be exactly to scale.

Give the exact angle for each of these resultants!

5) (5 N, 0º) + (10 N, 90º)  
6) (40 N, 180º) + (30 N, 270º)

7) 100 N west + 40 N east  
8) (6 N, 0º) + (5 N, 90º) + (12 N, 180º)

9) (6 N, 90º) + (5 N, 0º) + (10 N, 270º) + (2 N, 180º)