Chapter 3 Parallelogram Method of Vector Addition

Directions: Sketch out the following vectors including what is listed below:

- 1. Draw a coordinate axis system using a ruler and pencil
- 2. Draw and label each of the vectors according to the scale provided
- 3. Use the parallelogram method to determine the vector resultant. Draw and label the resultant.
- 4. Convert the resultant to Newtons using the scale provided and place a key on the drawing.

1. A 12 N force acts at 25 degrees and an 8 N force acts at 65 degrees. Determine the magnitude and direction (including angle) of the resultant. Scale is 1 cm = 1 N

2. A100 N force acts at 90 degrees and a 60 N force acts at 150 degrees. Determine the magnitude and direction (including angle) of the resultant. Scale is 1cm = 10 N

3. A 180 N force acts at 190 degrees and a 140 N force acts at 260 degrees. Determine the magnitude and direction (including angle) of the resultant. Scale is 1cm = 10N

4. A 200 N force acts at 250 degrees and a 300 N force acts at 280 degrees. Determine the magnitude and direction (including angle) of the resultant. Scale is 1cm = 10N

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