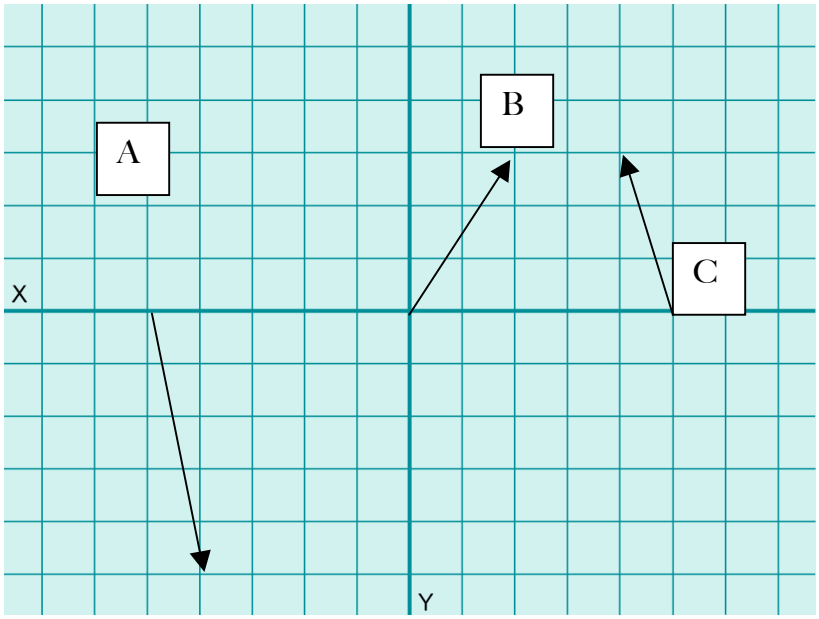
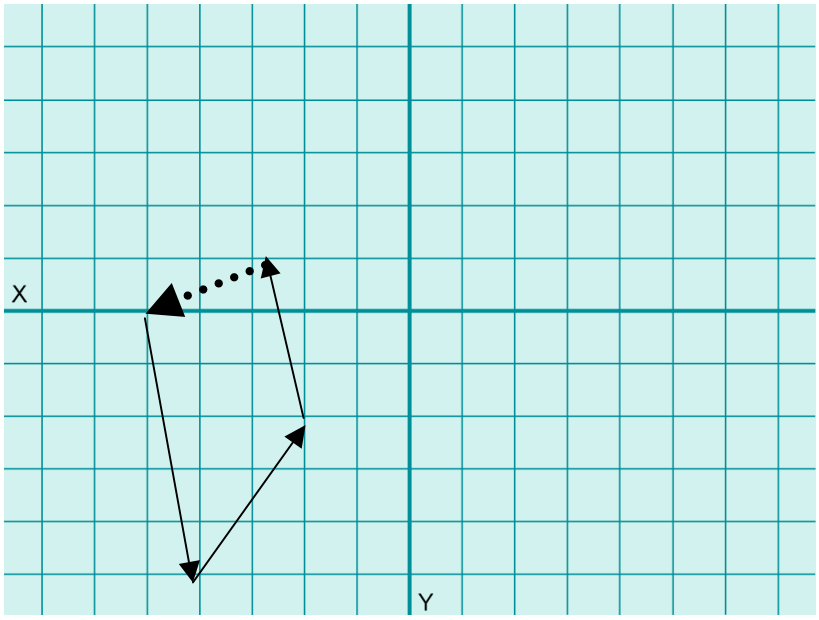
Learning Head to Tail Vector Addition Worksheet Name _____

For this activity you will be adding vectors using the head to tail method. Each mm will be equal to a man walking 3 meters. per minute. Use the graphs to create a resultant vector. For Example:

If these are my three vectors:



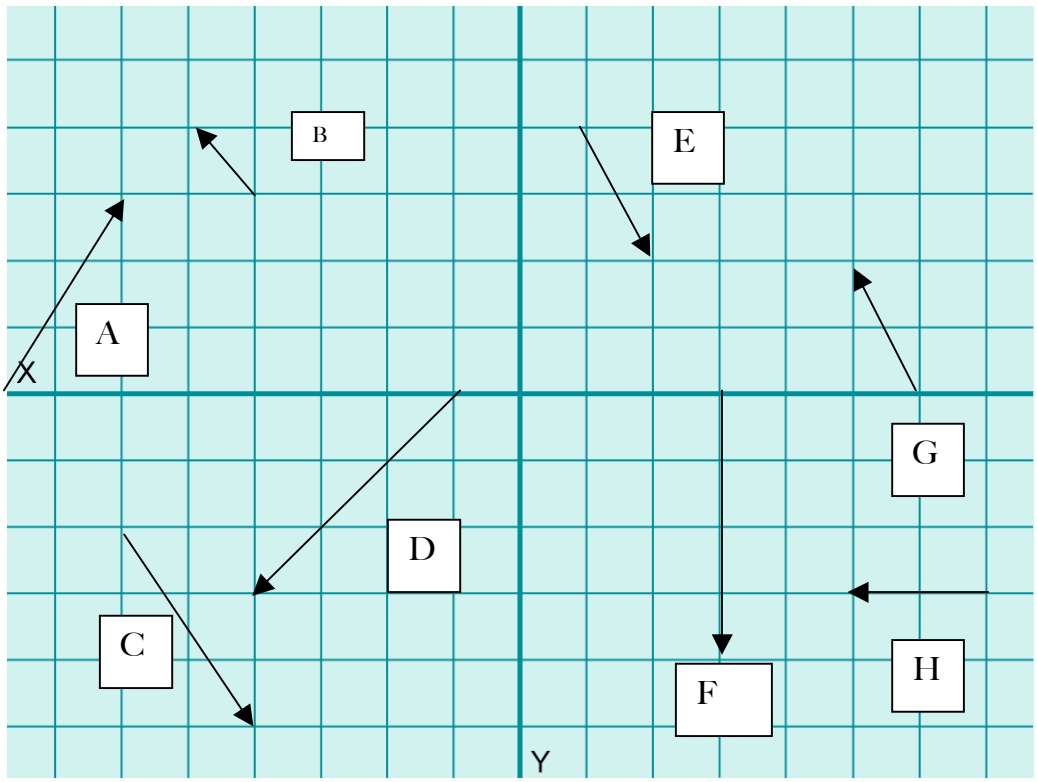
And I place the B vector on to the A vector I would see that vector B it two right and 3 up. So it would be attached to the arrow end of vector A in the same shape and direction. The same is true for vector C. It is 1 left and 3 up. It should start at the end of B and Have the same magnitude (length) and direction. so the resultant would be as seen below:



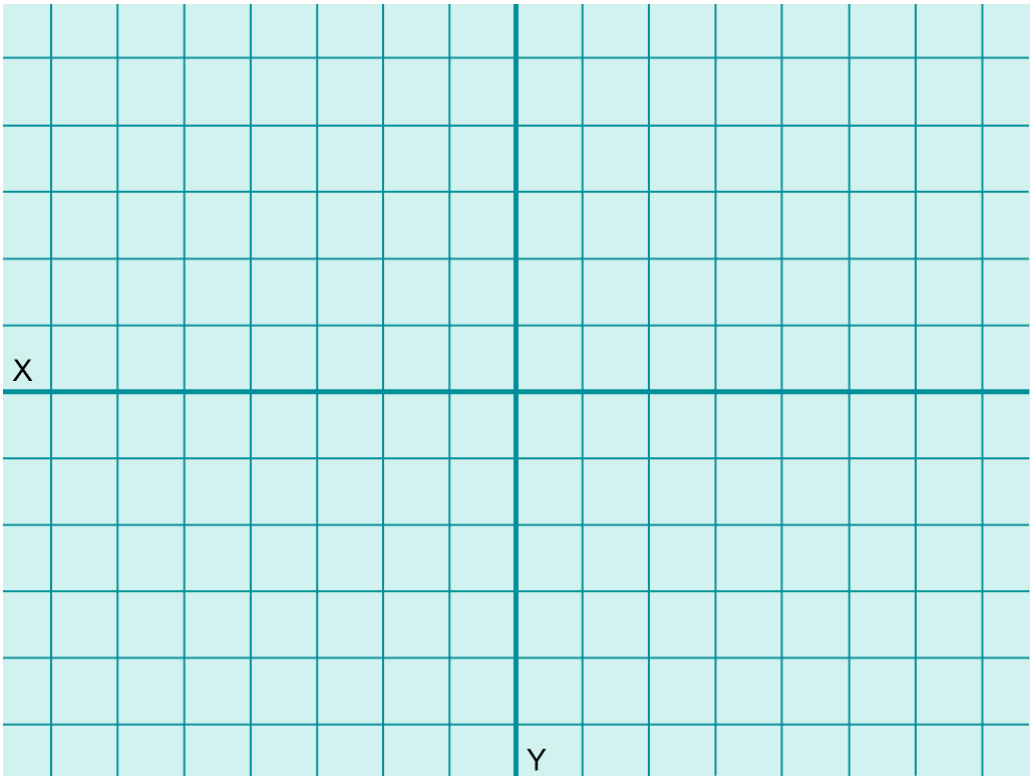
Now I can us a ruler and a protractor to find the resultant direction and magnitude.

Now you try.

Given the following vectors, create head to tail models and find the resultant magnitude and direction. the arrows are not perfect but use the corner that they are closest to:

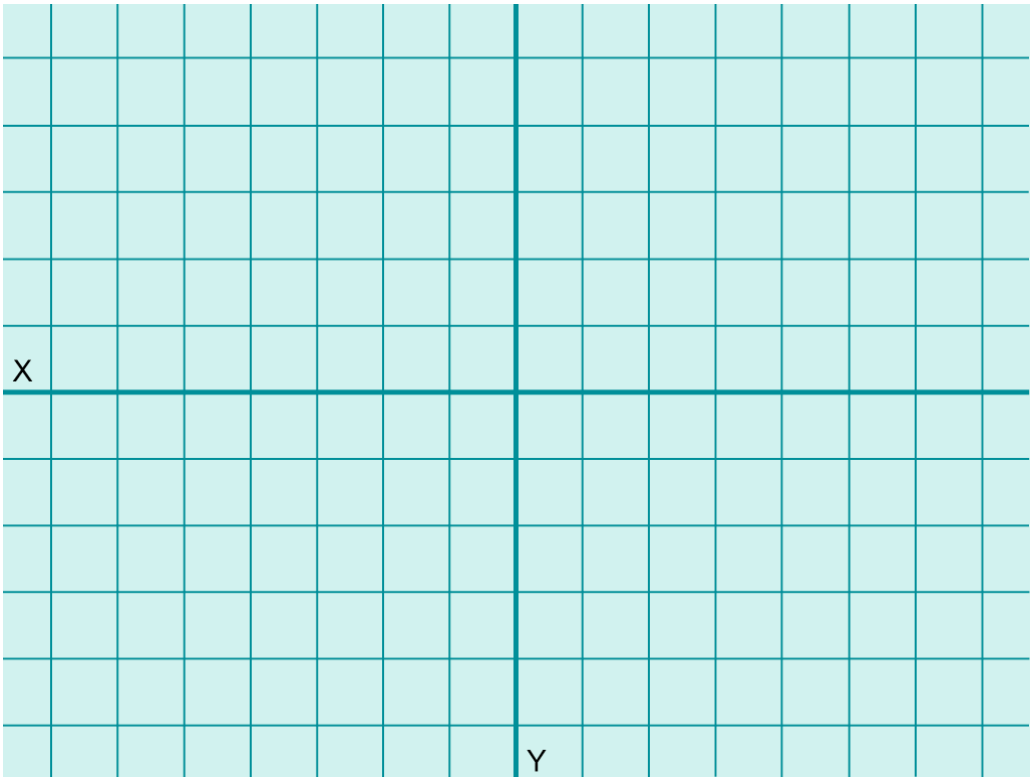


1. A + E + F



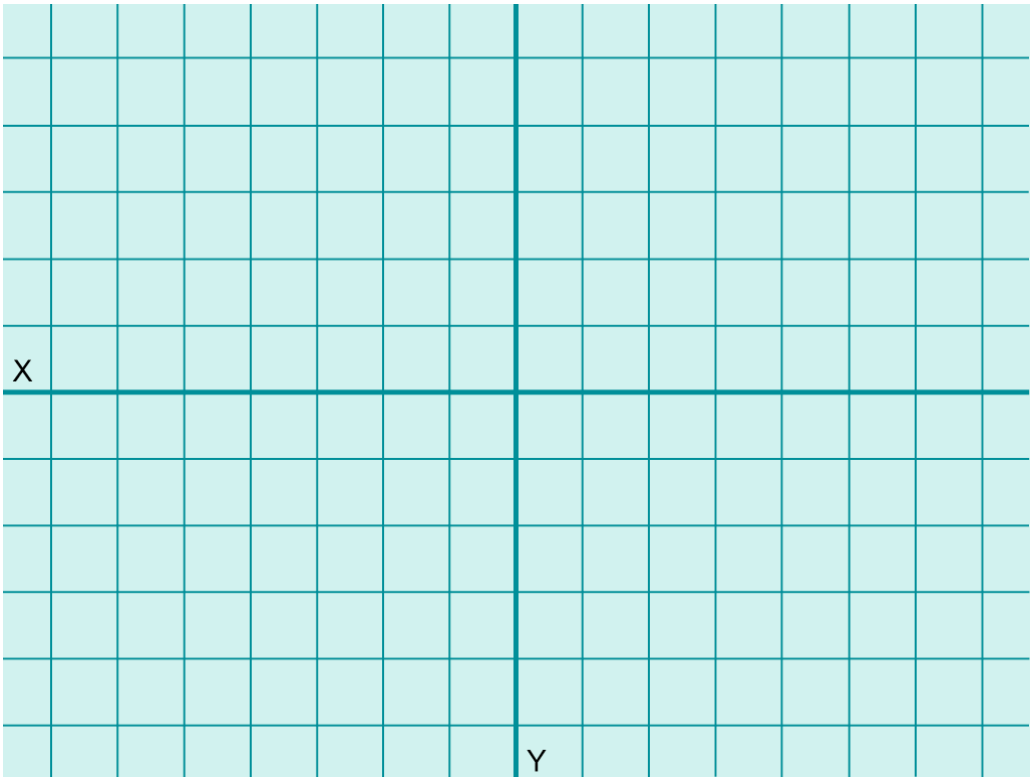
Magnitude = _____ Direction = _____

2. D + A + F



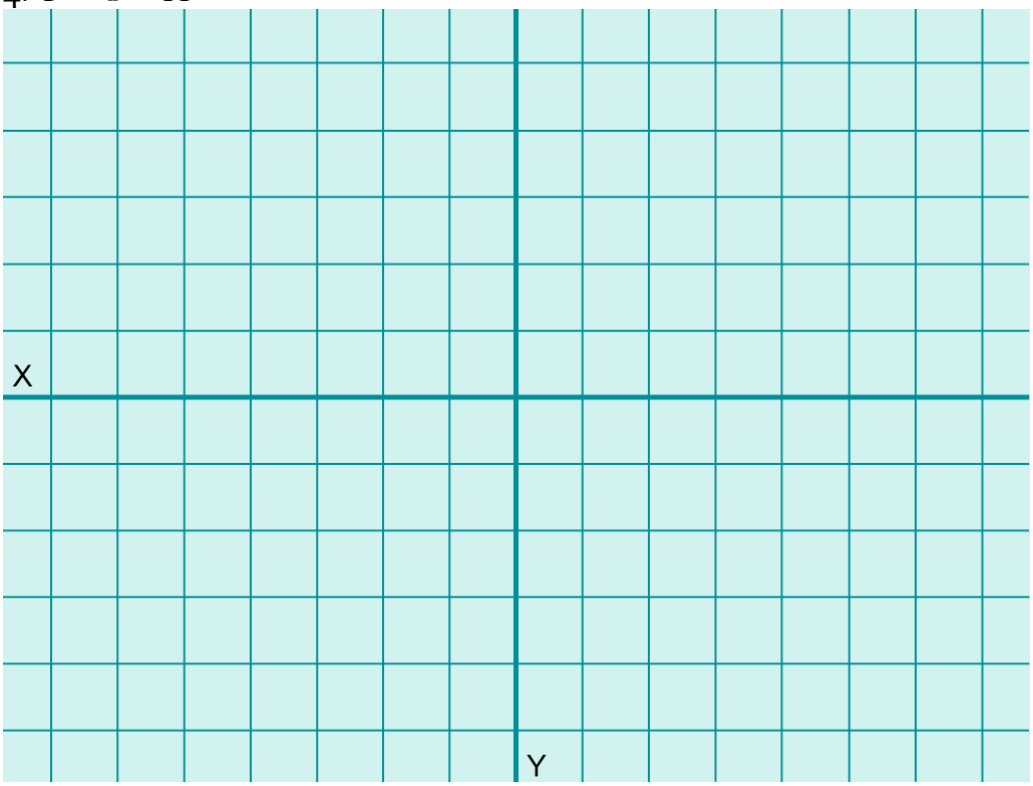
Magnitude = _____ Direction = _____

3. D + G + A



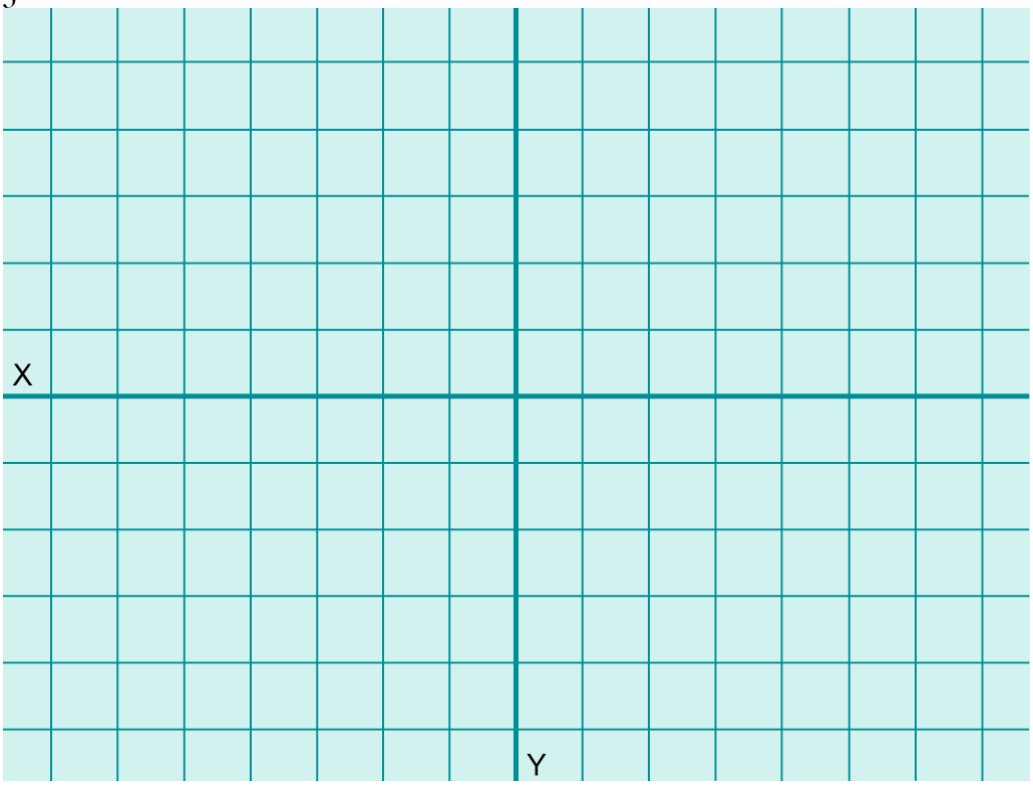
Magnitude = _____ Direction = _____

4. F + G + H



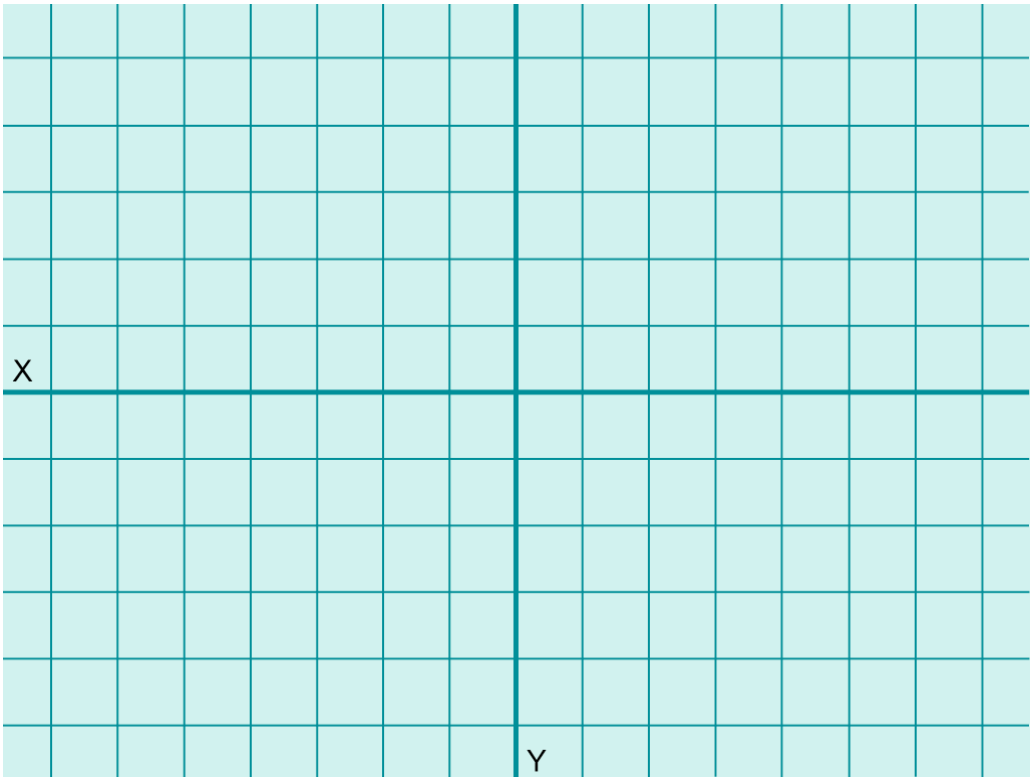
Magnitude = _____ Direction = _____

5. F + H + G



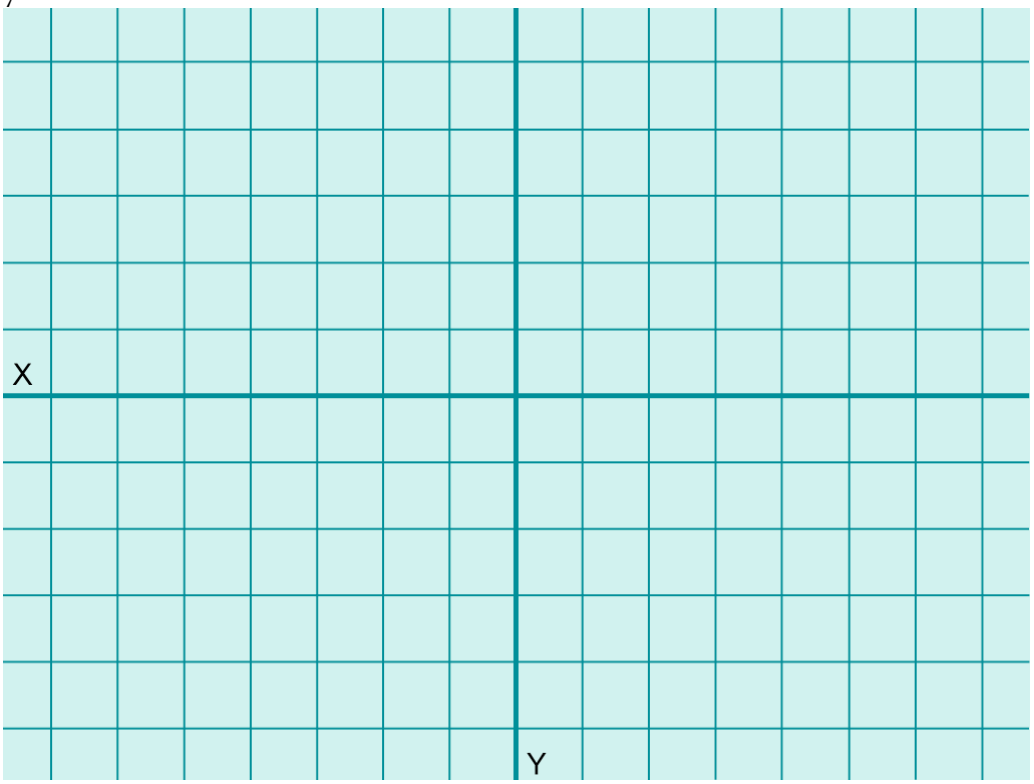
Magnitude = _____ Direction = _____

6. E + H + B



Magnitude = _____ Direction = _____

7. F + E + G + A + B



Magnitude = _____ Direction = _____