Part A:
List your component vectors here starting at Mission Headquarters. Use as many rows as you need.

| Paces | Direction |
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Answer Check: Do NOT write in this box until instructed.

## Part B:

1) On the graph paper on back, make a head-to-tail graph of your components as listed above. Choose your scale (ex. 1 block $=5$ paces) and list it on the graph. Plan ahead so that you don't run out of room on the graph paper.
2) Draw your resultant in another color.
3) Use a graph paper ruler to measure the magnitude of the resultant.
4) Use a protractor to find the angle and direction of the resultant.
5) List the magnitude and direction of your resultant in the box on the BACK.

## Part $C$ :

1) To compare your resultant to your partner's, pace must be converted to meters. Why?

Use the metric tape or meter sticks to measure the length of 5 paces.
5 paces $=$ $\qquad$ m
2) Convert the magnitude of your resultant (listed on the back) to meters using your fact above. Show your conversion here. Use the same method as in the previous unit.

Record your complete resultant vector: $\qquad$ m, $\qquad$。 $\qquad$ of $\qquad$
Record your partner's resultant vector: $\qquad$ m, $\qquad$。 $\qquad$ of $\qquad$

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