1. Define component - two or more vectors acting on the same point
2. Define resultant - one vector having the same effect as the combined components
3. When do you add components to get the resultant? when they act in the same direction When do you subtract them? when the are acting in opposite direction
4. Find the resultant of the following using the head to tail method. Write the complete answer in the boxes.
a. 11 units, $S$ and 6 units, W
b. 7.5 units, $N$ and 3.5 units, $E$
c. 500 units, $W$ and 400 units, $N$
d. 7 units, E and 12 units, S

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|  |  |  |  |  | $\bigcirc$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | b. 8 | 8.0 u | its, 2 | $25^{\circ}$ | , | of | N |
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|  |  |  |  |  | block | $k=100$ | 00 un | units |  |  |  |  |  |  |  |  |  |  |  |  | - | - |  |  |  |  |  |
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|  |  |  |  | c. 650 | 50 uni | units, 3 | $39^{\circ} \mathrm{N}$ | $N$ of | of W |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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