- When you add vectors that are not in one dimension you must break any vector that has more than one component into its x and y component vectors
- Once you get all the components, you can find the sum of the x components and the sum of the y components
- Using the sums, draw the new vector addition. You will now have a right triangle and can treat it accordingly
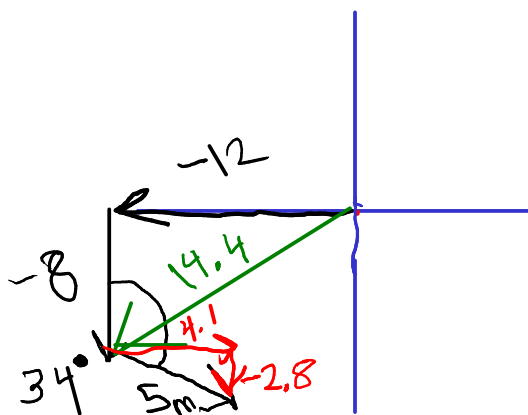
When solving, draw your vector addition first. Make sure you draw tip to tail. Then make a table as shown and fill it in with the appropriate values for each vector. Remember your final answer should have both a magnitude and a direction, unless otherwise specified.

Ex: A plane is flying at 500mph North with a wind with a speed of 10mph 10° NW acting on it. What is the overall velocity of the plane?
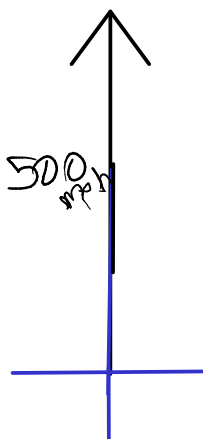
V	X	Y
1		
2		
Total		

Ex: Michelle took her dog for a walk. First, they went 12m West, then turned 8m South. The dog saw a squirrel and ran 5m SE at 34° to the horizontal. What was the final displacement for the dog?

V	X	Y
1	-12	0
2	0	-8
3	4.1	-2.8
Total	-7.9	-10.8