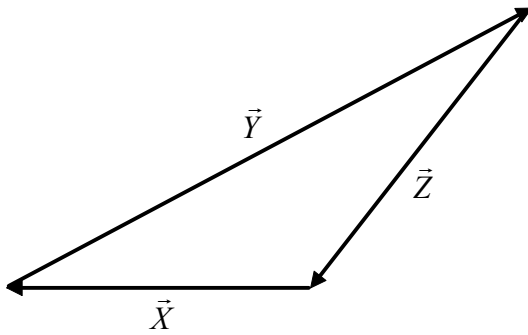
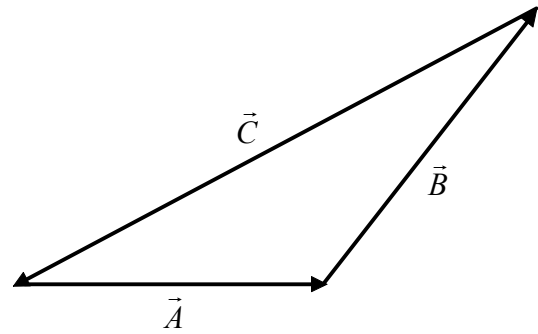


**Question:** Is any physical quantity having both magnitude & direction called vector?

**Answer:** Having both magnitude & direction for a physical quantity to be called vector is a necessary condition, but is not the sufficient condition. The physical quantity must also follow the triangle law of addition for it to be called a vector which means that the sum of three vectors represented by the three sides of a triangle all in clockwise sense or all in anticlockwise sense is equal to zero. For example, time has magnitude and always moves in forward direction but it is not a vector as it does not obey the triangle law of addition. Time follows the linear law of addition.



$$\vec{X} + \vec{Y} + \vec{Z} = \vec{0}$$



$$\vec{A} + \vec{B} + \vec{C} = \vec{0}$$