

### Answer on Question #48918, Physics, Other

#### Question:

if the each and every components of a vector are nonzero, then can the vector be zero???

#### Answer:

Zero vector is a vector that has zero magnitude. It is possible only if all components of a vector are zero:

$$\sqrt{x^2 + y^2 + z^2} = 0 \quad \Rightarrow \quad x = y = z = 0$$

Answer: no, it can't.

<http://www.AssignmentExpert.com/>