

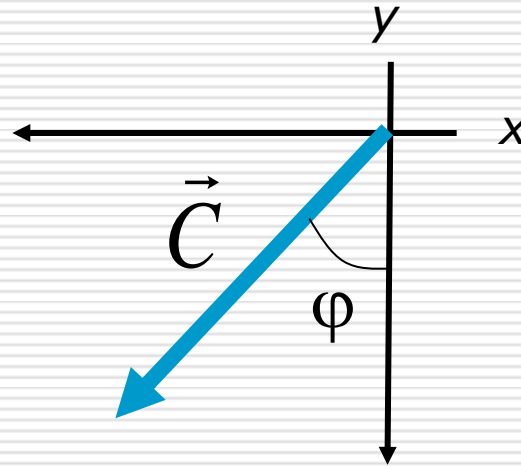
If each component of a vector is doubled, what happens to the angle of that vector?

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- A. it doubles
- B. it increases, but by less than double
- C. it does not change
- D. it is reduced by half
- E. it decreases, but not as much as half

Angle  $\varphi$  that specifies the direction of  $\vec{C}$  is given by

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- A.  $\tan^{-1}(C_x/C_y)$
- B.  $\tan^{-1}(C_x/|C_y|)$
- C.  $\tan^{-1}(|C_x|/|C_y|)$
- D.  $\tan^{-1}(C_y/C_x)$
- E.  $\tan^{-1}(C_y/|C_x|)$