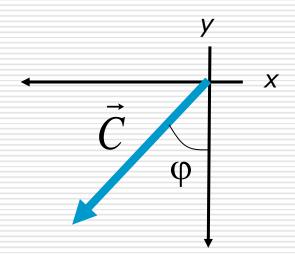
If each component of a vector is doubled, what happens to the angle of that vector?

- 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 $\hat{C}$ is given by



- 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.  $tan^{-1}(C_y/|C_x|)$