

# The Dot Product



## Question

Which of the following formulas involving vectors  $\vec{a}$ ,  $\vec{b}$ , and  $\vec{c}$  with  $\vec{a} \neq \vec{0}$  are meaningless?

A.  $\left(\frac{\vec{a} \cdot \vec{b}}{|\vec{a}|^2}\right) \vec{a}$

B.  $\frac{\vec{a} \cdot \vec{b}}{|\vec{a}|}$

C.  $(\vec{a} \cdot \vec{b})\vec{c} - (\vec{c} + \vec{b}) \cdot \vec{a}$

D.  $(\vec{b} \cdot \vec{a})\vec{c} - (\vec{c} \cdot \vec{a})\vec{b}$