Derivatives and Integrals of Vector Functions

Question

The figure shows the position vector $\vec{r}(t)$ along a curve in the plane. Which of the following tangent vectors do you you think should have the smallest magnitude?

A. $\vec{r}\,'(0)$
B. $\vec{r}\,'(1)$
C. $\vec{r}\,'(2)$
D. $\vec{r}\,'(3)$