

Motion in Space: Velocity and Acceleration



Question

The cannon from the previous question is tilted to have angle of elevation 30° . Which of the following statements about the position function is NOT true?

- A. $\vec{r}''(t) = -g\vec{j}$.
- B. The \vec{j} -component of $\vec{r}'(0)$ is smaller than the \vec{i} -component of $\vec{r}'(0)$.
- C. $|\vec{r}'(0)| = v_0$.
- D. The \vec{i} -component of $\vec{r}(t)$ is zero.

