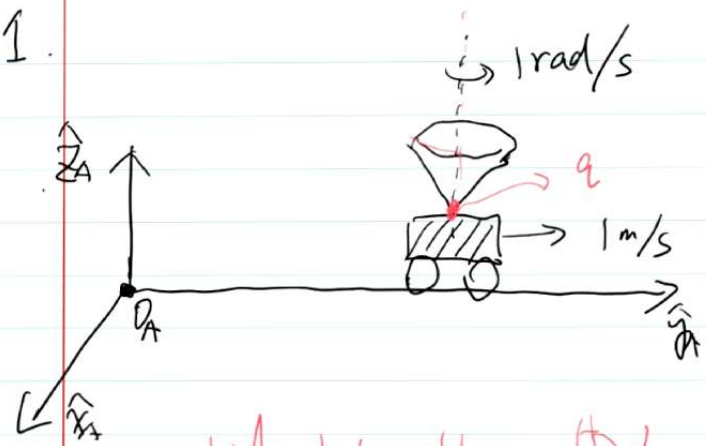
Quiz 1.



$$q(t=0) = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

What's the V_{top}

Quiz 1:

$$ {}^{A}V_{top} = \begin{bmatrix} {}^{A}w \\ {}^{A}V_{OA} \end{bmatrix} $$

$$ {}^{A}w = \begin{bmatrix} 0 \\ 0 \\ 1 \end{bmatrix} \qquad {}^{A}V_{q} = \begin{bmatrix} 0 \\ 1 \\ 0 \end{bmatrix} $$

$$ {}^{A}V_{OA} = {}^{A}V_{q} + {}^{A}w \times {}^{A}\overrightarrow{qOA} $$

$$ = \begin{bmatrix} 0 \\ 1 \\ 0 \end{bmatrix} + \begin{bmatrix} 0 \\ 0 \\ 1 \end{bmatrix} \times - \begin{bmatrix} 0 \\ t \\ 0 \end{bmatrix} $$

$$ = \begin{bmatrix} t \\ 1 \\ 0 \end{bmatrix} $$

$$ \text{Q1: } {}^{A}V_{top} = \begin{bmatrix} 0 \\ 0 \\ 1 \\ t \\ 1 \\ 0 \end{bmatrix} $$