(3pts) #25 Your robot's batteries have a capacity of 1200 mAh. When the robot moves forward, its motors consume 600 mA. The forward speed of the robot is .5 ft/sec. How many inches will the robot travel before it stops? Assume the motors will run until the last coulomb of charge has been consumed.

\[
\text{1200 mAh} \\
\text{I} = 600 \text{ mA} \\
V = .5 \text{ ft/sec} \\
t = \frac{1200 \text{mAh}}{600 \text{mA}} = 2 \text{ hrs} = 7200 \text{ sec}
\]

Velocity = \frac{\Delta \text{distance}}{\Delta t} \Rightarrow \Delta \text{distance} = (\Delta t)(\text{velocity})

= (7200)(.5)

= 3600 \text{ ft} = 43,200 \text{ in}