

TL-3

Measurements of the voltage and current at two points of a section of a  $100\ \Omega$  transmission line were made at  $t = 0$ . The distance between the two points is  $0.4\ \text{m}$ . If the velocity of the line is  $2 \times 10^8\ \text{m/s}$  (slower than the vacuum speed of light), what will be the voltage  $V$  and current  $I$  at the midpoint between these two points at  $t = 2\ \text{ns}$ ?

