After a long time the capacitors are charged and no current passes through them $\Rightarrow V_1 = V_2 = 0$ $\Rightarrow C_1$ and $C_2$ are charged

$\Rightarrow q_2 = C_2 V = 7 \times 10^{-6} \times 252 V = 1.76 \times 10^{-3} C$

If the diode were to be removed, $V$ would be $V$ from a), due to a short circuit.

But since the diode blocks current to leak to the left,

\[ V' = 2V = 2 \times 2.5 \times 10^{-3} V = 50.4 \times 10^{-3} V \]

and the capacitors will start discharging through the resistors until the sum of their voltages will be again $V$. (discharging through resistors takes some time so $V_{\text{initial}} = 2V$)

The device amplifies the voltage (doubles it) for a short while, so it can be an amplifier. ("a voltage doubler")