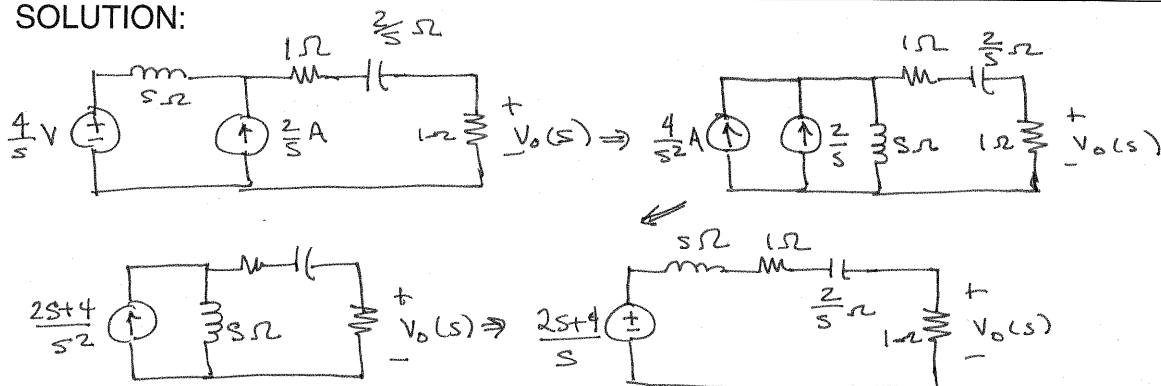


14.18 Use source transformation to solve Problem 14.17.**SOLUTION:**

$$V_o(s) = \frac{2s+4}{s} \left[\frac{1}{s+1+\frac{2}{s}+1} \right] = \frac{2s+4}{s} \left(\frac{s}{s^2+2s+2} \right) = \frac{2(s+2)}{s^2+2s+2}$$

$$V_o = \frac{K_1}{s+1-j1} + \frac{K_1^*}{s+1+j1} \quad K_1 = \sqrt{2} \angle -45^\circ$$

$$v_o(t) = \left[2\sqrt{2} e^{-t} \cos(t - 45^\circ) \right] u(t) \text{ V}$$