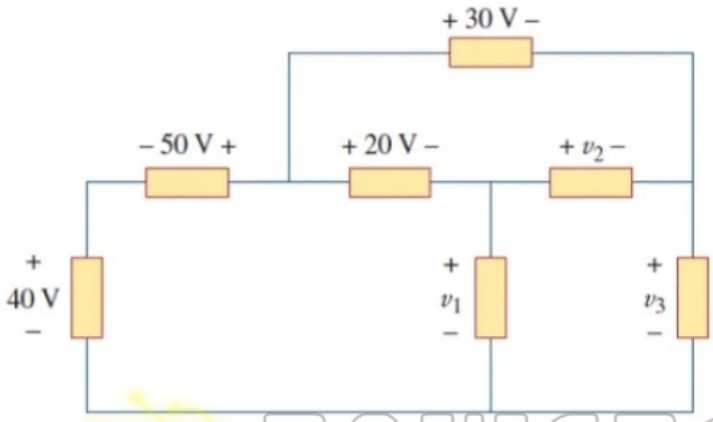
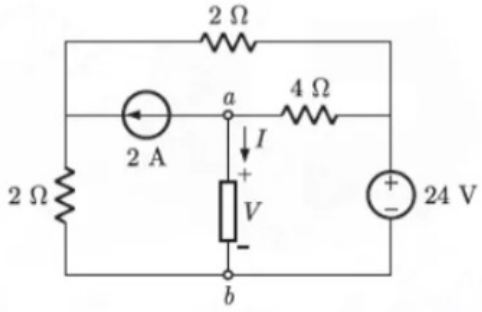
Find the value of v_3 in the circuit given below.

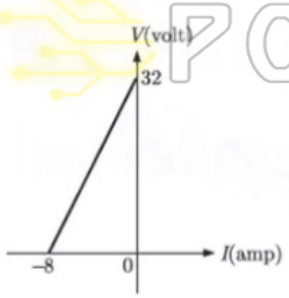


- -10 V
- -70 V
- 60 V
- 70 V
- -60 V

The V-I curve of the elment between the terminals a, b is given by



○



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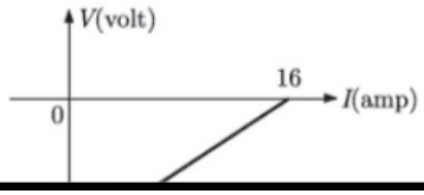
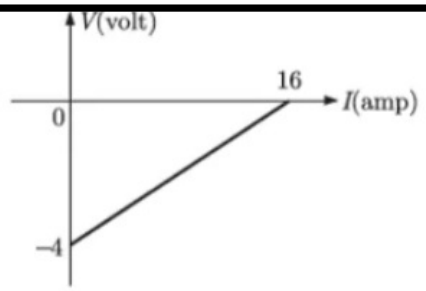
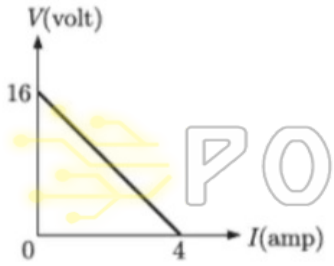
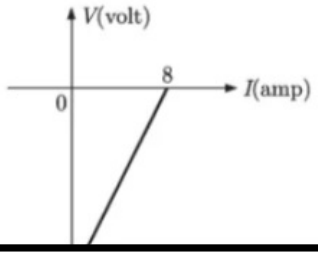
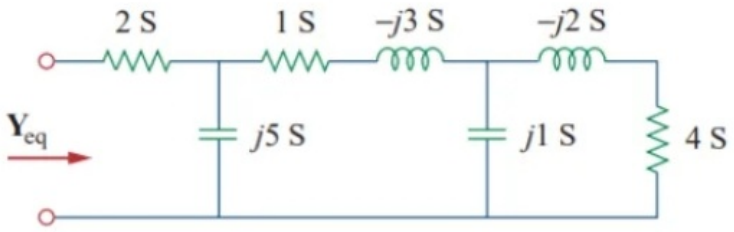






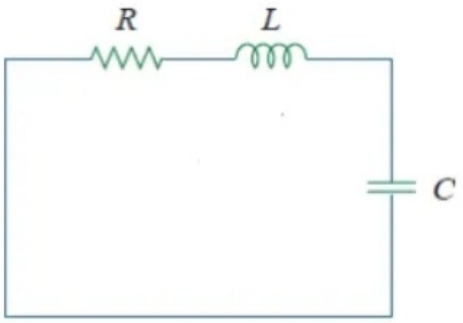


For the circuit shown below, find the value of the equivalent admittance of the circuit $\mathrm{Y_{eq}}$



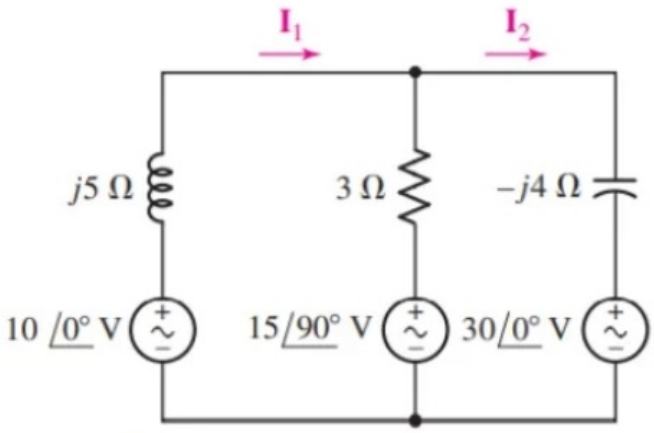
- $\mathrm{Y_{eq}} = 1.661 - \mathrm{j}0.6647$
- $\mathrm{Y_{eq}} = 0.6647 + \mathrm{j}1.661$
- $\mathrm{Y_{eq}} = 0.6647 - \mathrm{j}1.661$
- $\mathrm{Y_{eq}} = 0.6647 - \mathrm{j}0.6647$
- $\mathrm{Y_{eq}} = 1.661 + \mathrm{j}0.6647$

What type of natural response will the circuit have when $\mathrm{R} = 0$?



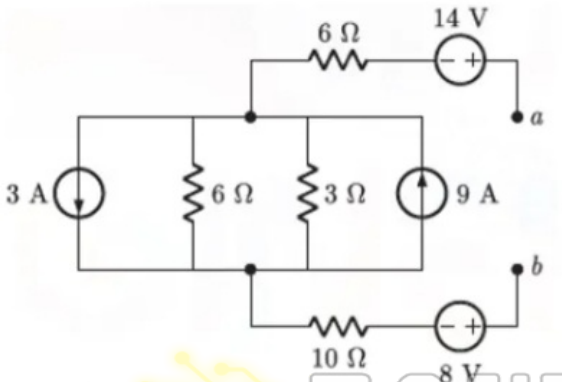
- An overdamped response
- An undamped response
- A critically damped response
- An underdamped response

Evaluate the phasor current I_2 .



- $6.255\angle -170.094^{\circ}$
- $6.255\angle -140.518^{\circ}$
- $9.979\angle -170.094^{\circ}$
- $7.17\angle -144.9^{\circ}$
- $9.979\angle -140.518^{\circ}$

One of the following circuits is equivalent to circuit shown below.



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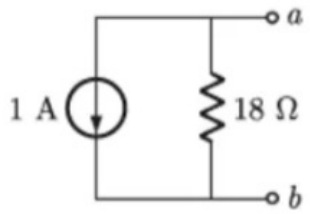
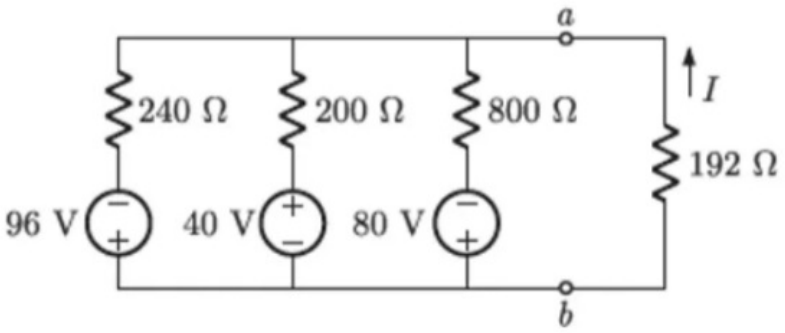


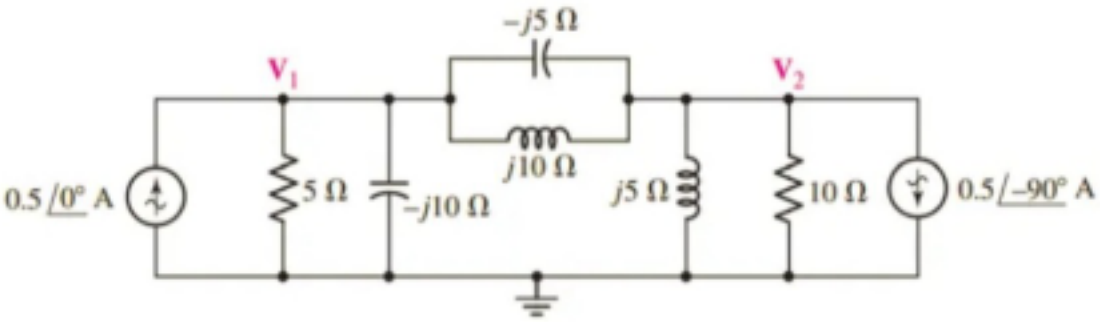
○

Evaluate the current I in the circuit shown below.



- -10 mA
- -100 mA
- 233.33 mA
- 10 mA
- 100 mA
- -233.33 mA

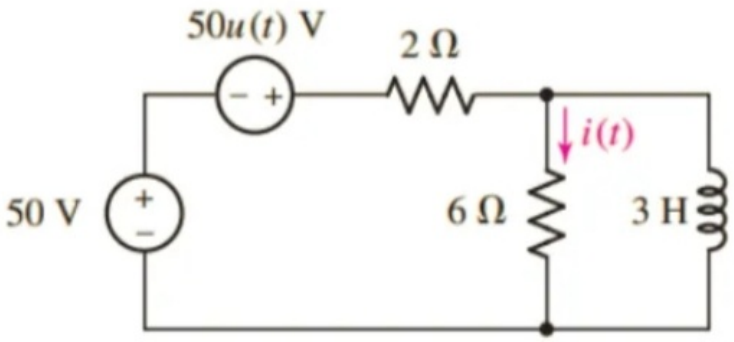
Find the time-domain node voltage $v_1(t)$.



Zoom image

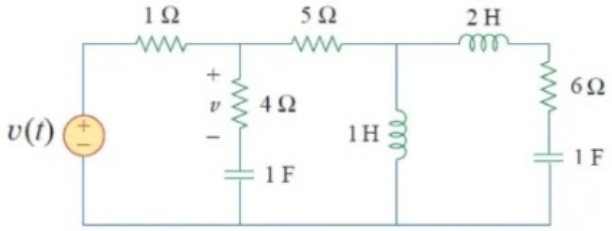
- $v_1(t) = -\sin(\omega t)$
- $v_1(t) = \sin(\omega t)$
- $v_1(t) = 3.606\cos(\omega t + 123.69^\circ)$
- $v_1(t) = 4.47\cos(\omega t + 116.6^\circ)$
- $v_1(t) = 2.24\cos(\omega t - 63.4^\circ)$

Find an expression for the current $i(t)$, for t>0 in the circuit below.



- $i(t) = 50 - 25e^{-0.5t}$ A
- $i(t) = 50 - 37.5e^{-0.5t}$ A
- $i(t) = 37.5e^{-0.5t}$ A
- $i(t) = 6.25e^{-0.5t}$ A
- $i(t) = 50 - 18.75e^{-0.5t}$ A

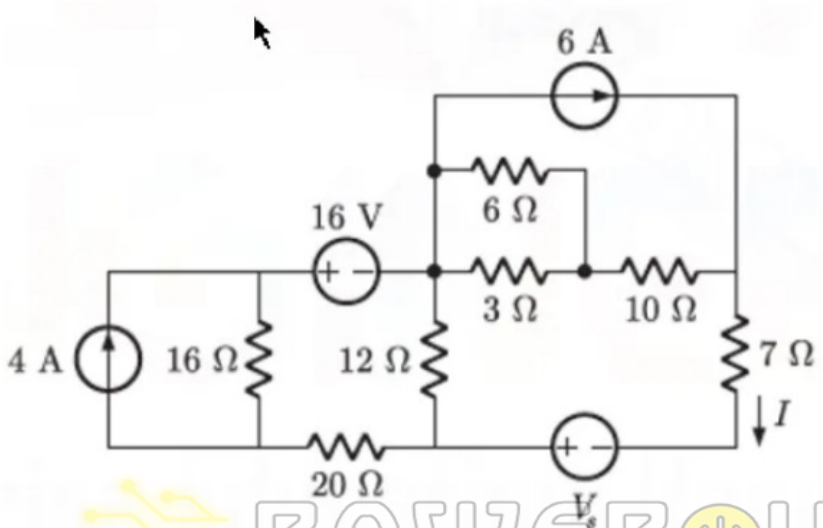
If v(t)=20 cos(1000000 t+70°). What is the maximum value of the voltage v(t) (across the 4Ω resistor) in the figure?



Zoom image

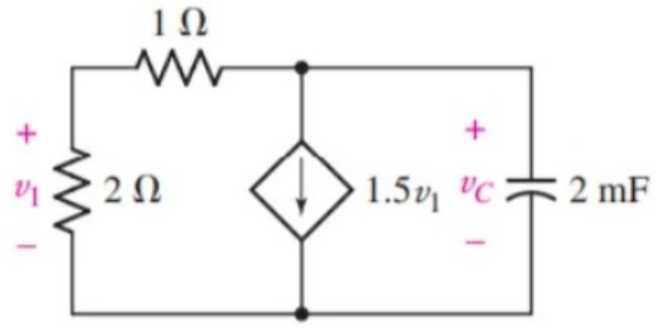
- 16 V
- 0 V
- 20 V
- 8 V
- 4 V

If I = 5 A in the circuit below, then the value of V_s is



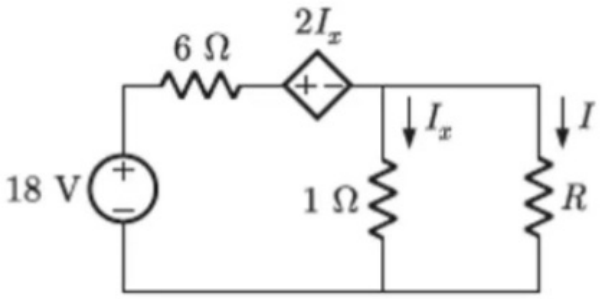
- 56 V
- 224 V
- 228 V
- 200 V
- 28 V

Considering the circuit below, evaluate v_1 at t=10^{-3} s when $v_c(0^-) = 11V$



- 7.5303 V
- 5.6476 V
- 11 V
- 3.7651 V
- 22 V
- 11.295

For the circuit below, what value of R that will cause I = 1 A ?



- R=2/3 Ω
- R=4/3 Ω
- R=1/3 Ω
- It can not be determined
- R=0 Ω