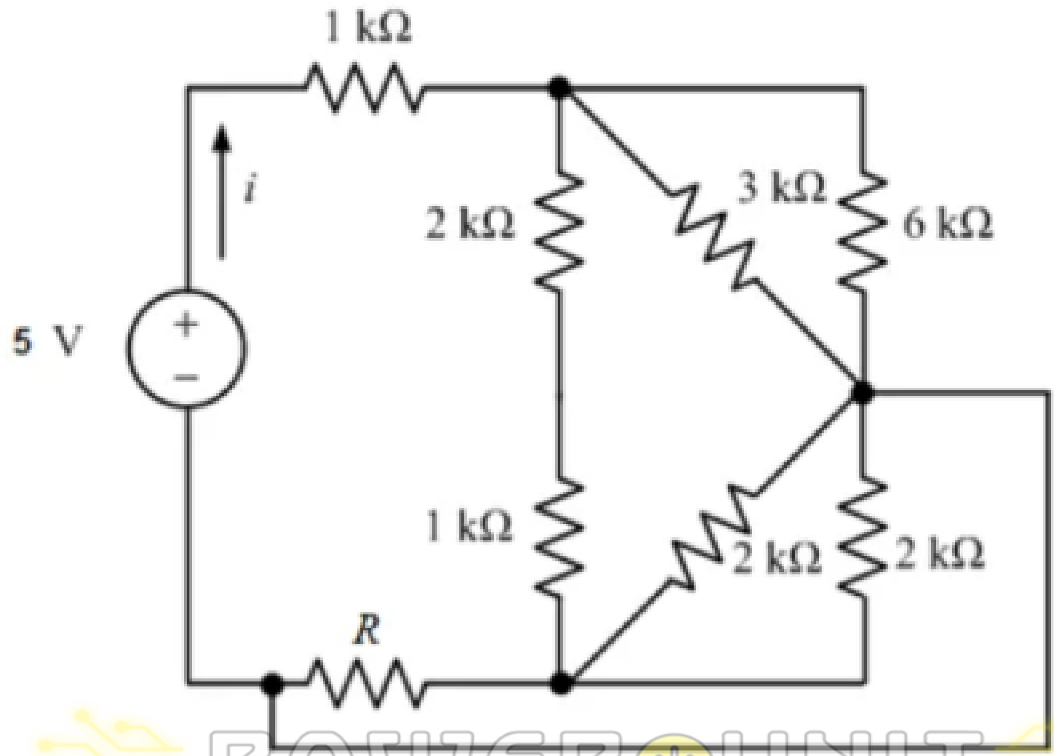
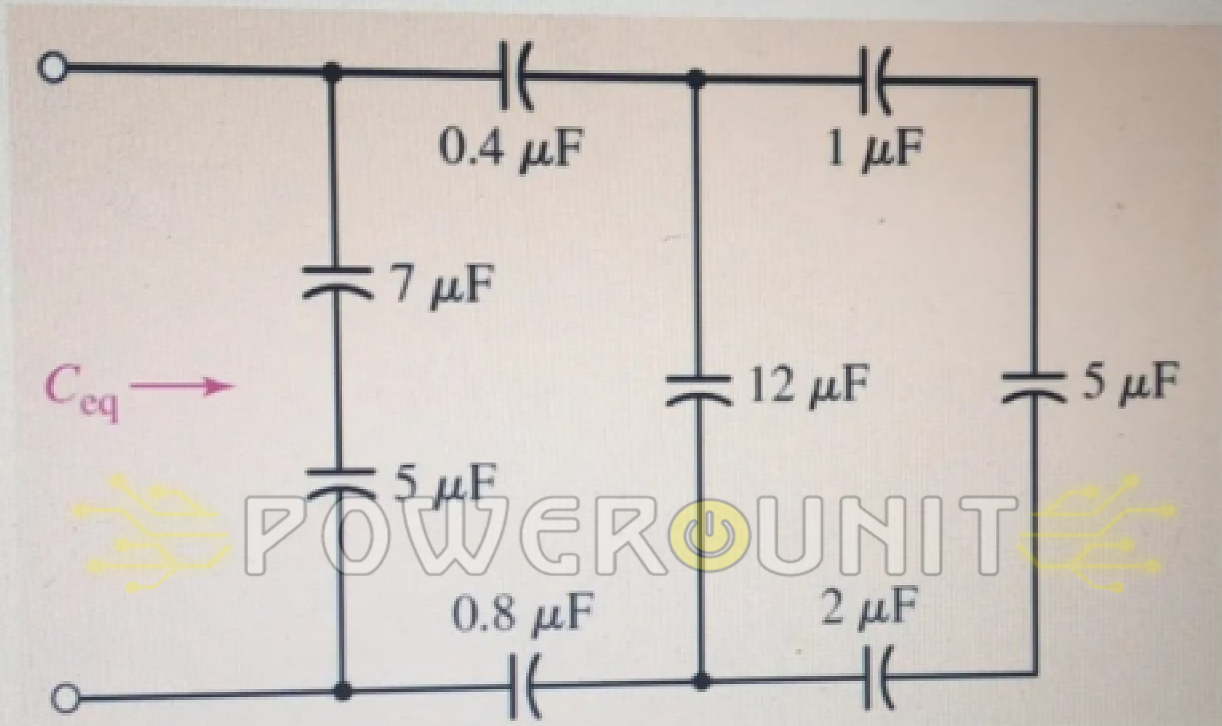
Find the value of i when $R = \frac{5}{2}$ kΩ



- $\frac{50}{23}$ mA
- $\frac{13}{6}$ mA
- 1 mA
- $\frac{1}{3}$ mA
- $\frac{35}{16}$ mA

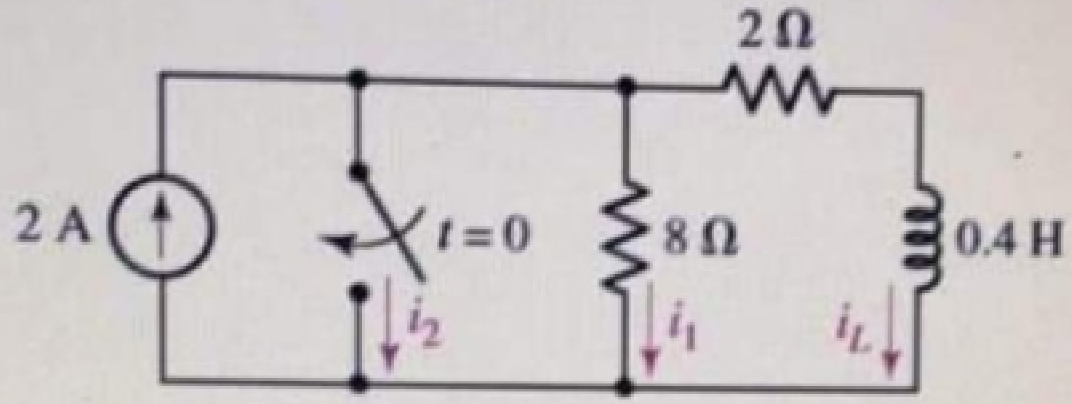
Find C_{eq} for the network in the figure.



Zoom image

- ○ 6.18 μF
- ◉ 3.18 μF
- ○ 4.18 μF

Find the value of $i_2(t)$ at $t = 90$ ms.



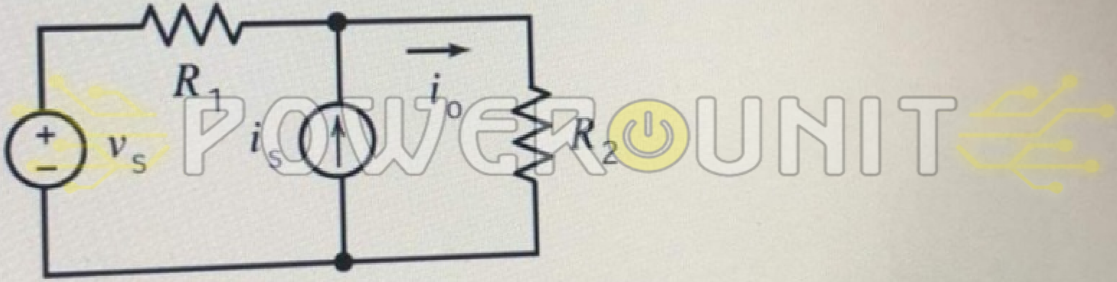
- 2 A
- 0.7404 A
- 0.9798
- 0.4704 A
- 0.798 A

The circuit shown in Figure 1 has two inputs, v_s and i_s, and one output i_o. Given the following two facts:

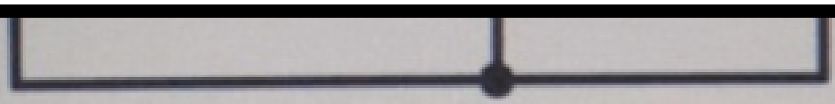
1) The output is i_o = 0.45 A when the inputs are i_s = 0.25 A and v_s = 15 V.

2) The output is i_o = 0.3 A when the inputs are i_s = 0.5 A and v_s = 0 V.

Find the values of the resistances are R_1 and R_2



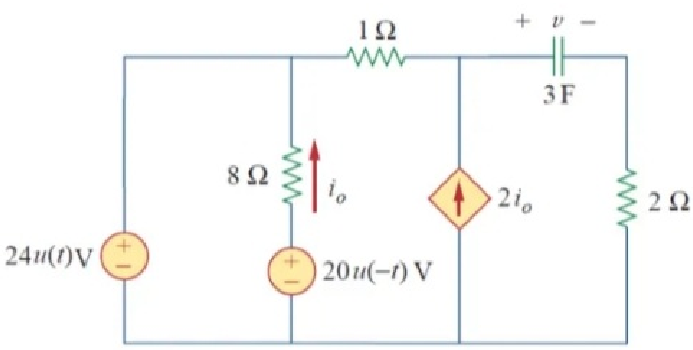
- [x] R_1=30 Ω, R_2=20 Ω
- [ ] R_1=10 Ω, R_2=15 Ω



- [x] R_1=30 Ω, R_2=20 Ω
- [ ] R_1=10 Ω, R_2=15 Ω
- [ ] R_1=15 Ω, R_2=10 Ω
- [ ] R_1=20 Ω, R_2=30 Ω
- [ ] R_1=45 Ω, R_2=30 Ω
- [ ] R_1=30 Ω, R_2=45 Ω
- [ ] R1=20 Ω, R2=45 Ω

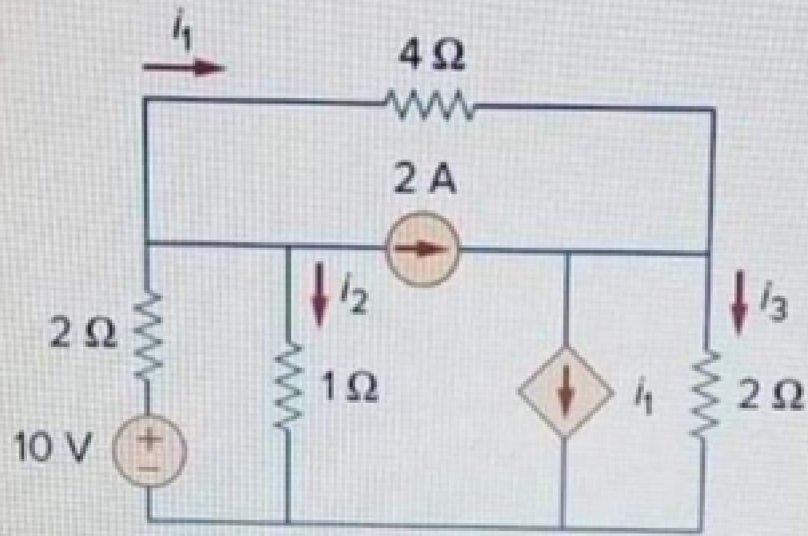
SUBMIT ANSWER

Find an expression for the voltage across the capacitor (i.e., v(t) for t>0)



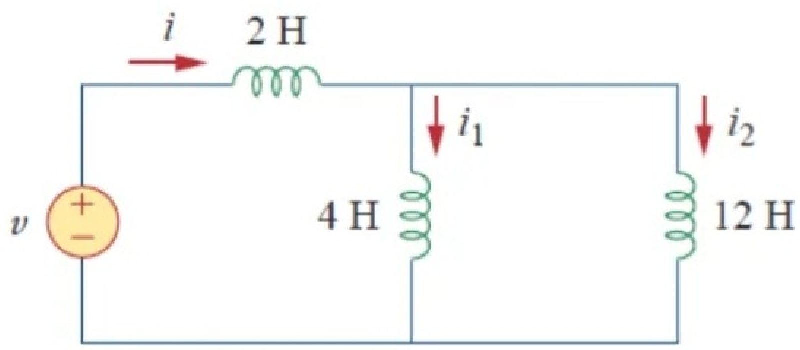
- $v(t) = 40 - 35e^{-\frac{t}{3}}$ V
- $v(t) = 30 - 25e^{-\frac{t}{9}}$ V
- $v(t) = 40 - 35e^{-\frac{t}{12}}$ V
- $v(t) = 30 - 25e^{-\frac{t}{3}}$ V
- $v(t) = 30 - 25e^{-\frac{t}{12}}$ V
- $v(t) = 40 - 35e^{-\frac{t}{9}}$ V

Find the value of i_2.



- $\frac{3}{7}$ A
- −2 A
- $-\frac{3}{7}$ A
- $\frac{16}{7}$ A
- $-\frac{16}{7}$ A
- 2 A

Let $i(0) = \alpha$ A and $i_2(0) = -4$ A. Find an expression for $i_2(t)$ when $v(t) = 400e^{-5t}$ V



- $i_2(t) = (-16e^{-5t} + \alpha)$ A
- $i_2(t) = -4e^{-5t}$ A
- $i_2(t) = -16e^{-5t}$ A
- $i_2(t) = (-16e^{-5t} + \beta)$ A
- $i_2(t) = 16e^{-5t}$ A
- $i_2(t) = (-4e^{-5t} + \beta)$ A