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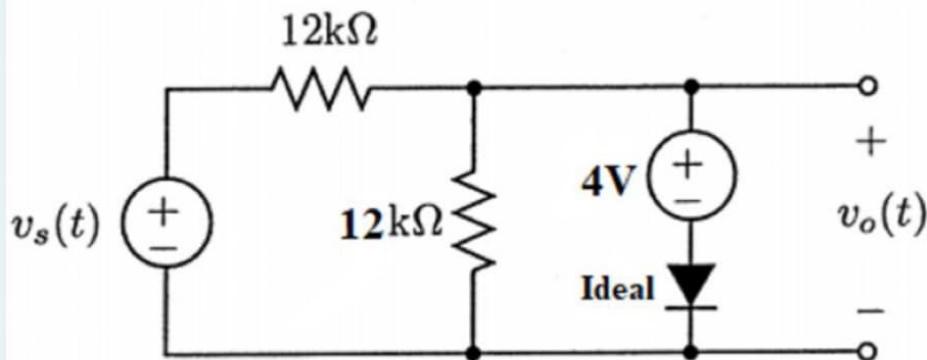
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Flag question

For the circuit shown , when the diode is on

$$V_o(t) = \boxed{\hspace{10em}} \quad \Leftrightarrow \quad V \text{ for } V_s(t)$$

$$\boxed{\hspace{10em}} \quad \Leftrightarrow \quad V$$

**Question 2**

Not yet answered

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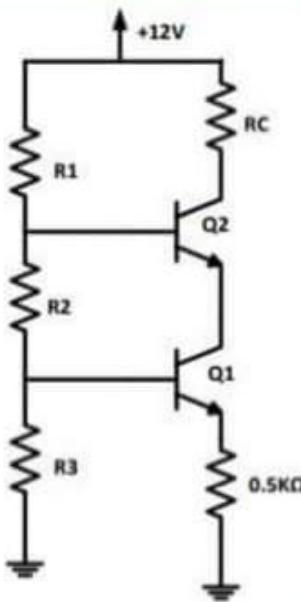
The BJT Transistors shown are in the active region and have $\beta = \infty$. Complete the design of the circuit such that $I_{C2} = 2\text{mA}$, and $V_{CE1} = V_{CE2} = 2\text{V}$. Let $R_1 + R_2 + R_3 = 100\text{k}\Omega$.

1. $RC =$ $\pm \text{k}\Omega$

2. $R_1 =$ $\pm \text{k}\Omega$

3. $R_2 =$ $\pm \text{k}\Omega$

4. $R_3 =$ $\pm \text{k}\Omega$

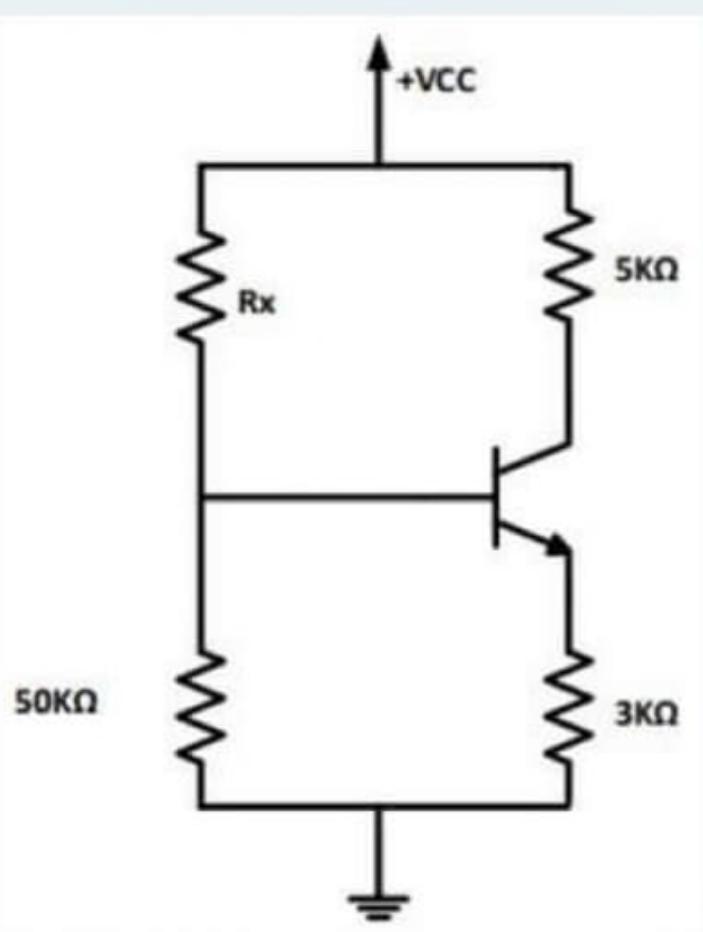


The BJT transistor in the circuit shown is in the active region and has $\beta = 100$. Complete the design of the circuit so that

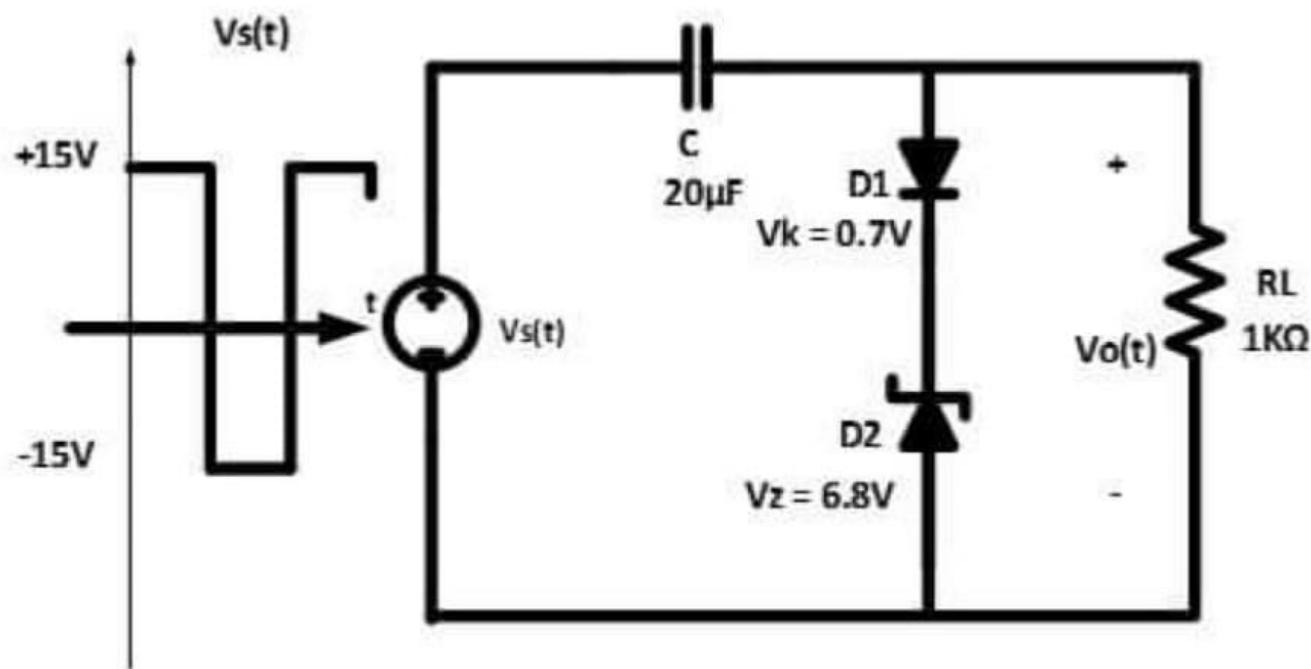
$I_C = 1.28\text{mA}$, and $V_C = 8.6\text{V}$

1. $R_x = \boxed{\hspace{2cm}} \div \text{K}\Omega$

2. $V_{CC} = \boxed{\hspace{2cm}} \div \text{V}$

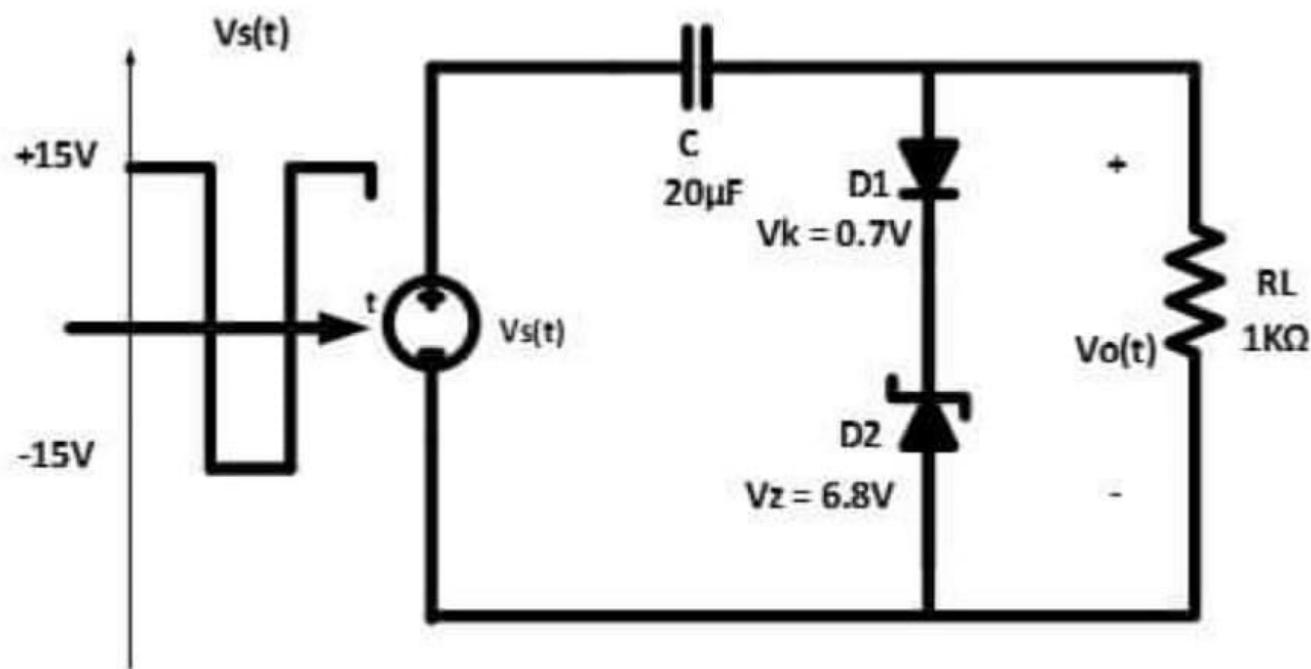


For the circuit shown, what is the minimum value of the output voltage $V_o(t)$?



- a. None of the listed values
- b. - 14.2V.
- c. - 22.5V.
- d. - 6.8V.
- e. -30V
- f. - 9.1V.
- g. - 15V

For the circuit shown, what is the minimum value of the output voltage $V_o(t)$?



- a. None of the listed values
- b. - 14.2V.
- c. - 22.5V.
- d. - 6.8V.
- e. -30V
- f. - 9.1V.
- g. - 15V

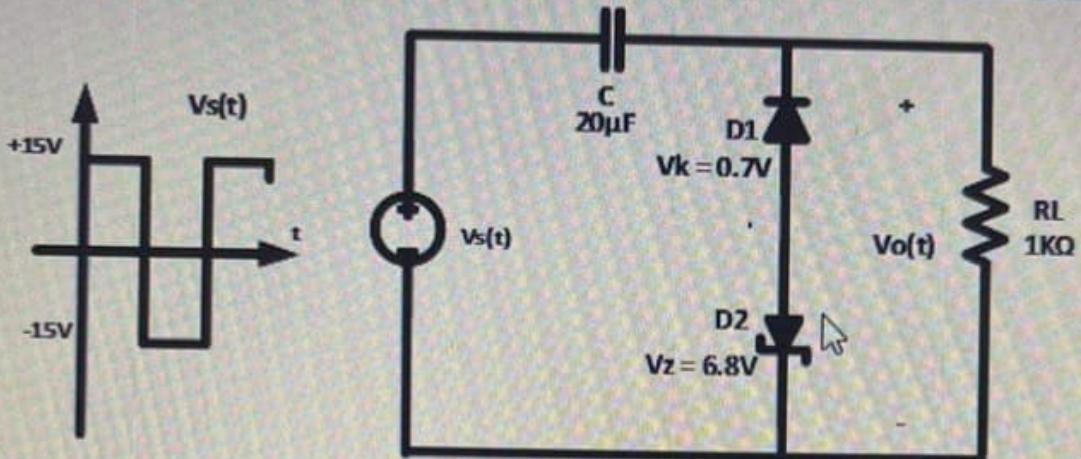
Question 3

Correct

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For the circuit shown, what is the maximum value of the output voltage $V_o(t)$.



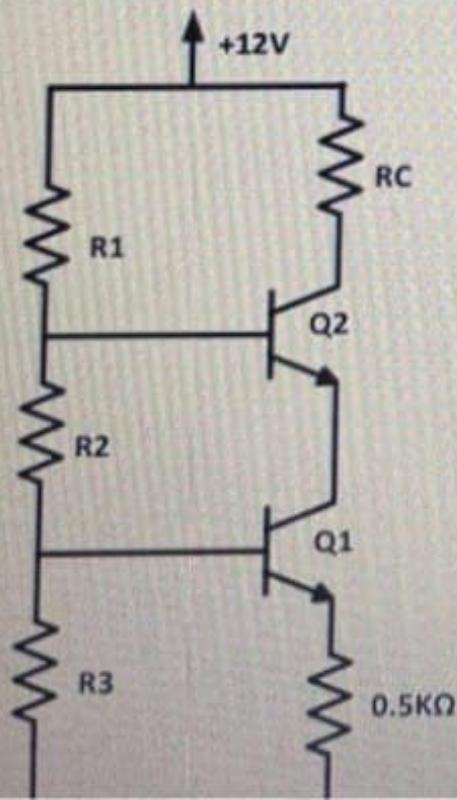
- a. 14.2V.
- b. 22.5V.
- c. +30V
- d. 9.1V.
- e. None of the listed values
- f. 6.8V.
- g. -15V

Type here to search



The BJT Transistors shown are in the active region and have $\beta = \infty$. Complete the design of the circuit such that $I_{C2} = 1\text{mA}$, and $V_{CE1} = V_{CE2} = 3\text{V}$. Let $R_1 + R_2 + R_3 = 100\text{K}\Omega$.

1. $R_C = 16.67 \text{ K}\Omega$
2. $R_1 = 65 \text{ K}\Omega$
3. $R_2 = 25 \text{ K}\Omega$
4. $R_3 = 10 \text{ K}\Omega$



Question 4

Correct

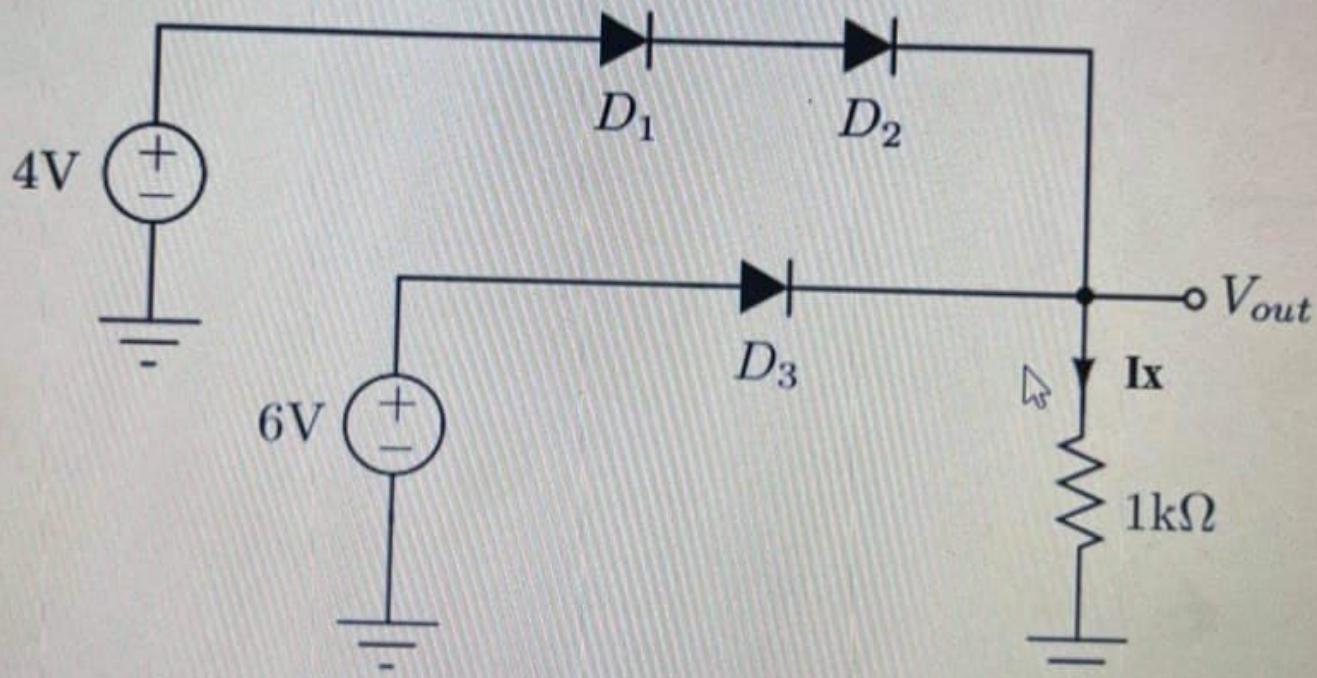
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- f. 6.8V.
- g. -15V

The diodes in the circuit shown have $V_K = 0.7V$

$$I_x = \boxed{5.3} \quad \text{mA}$$



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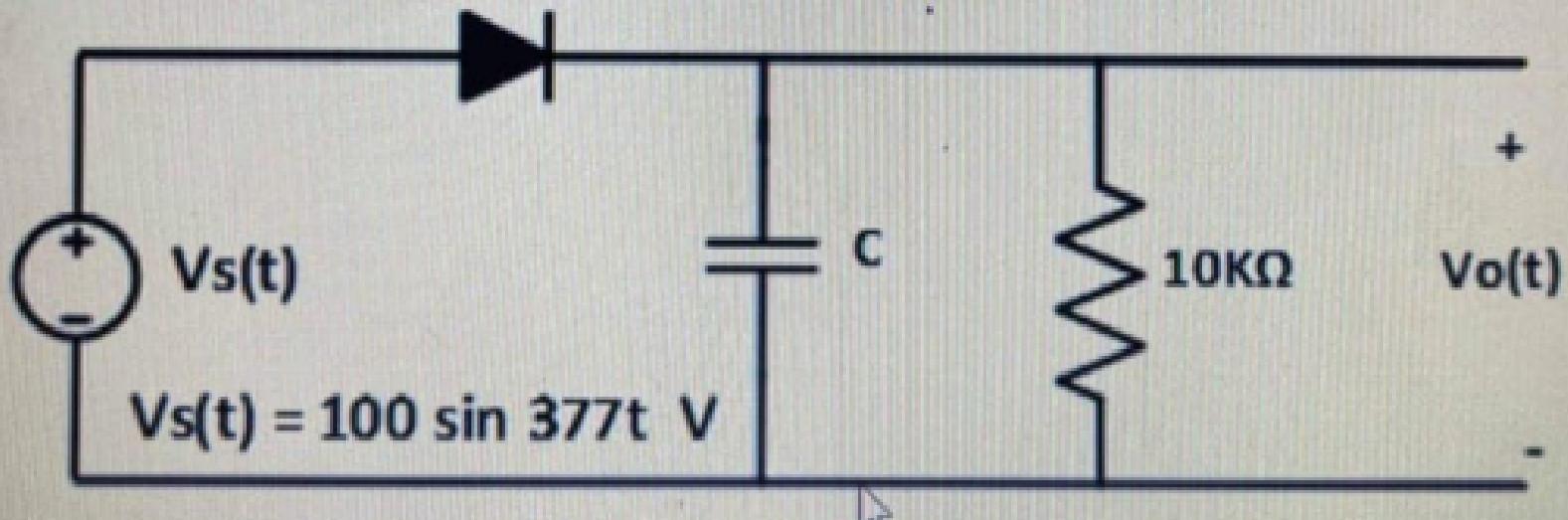


For the circuit shown, the value of the capacitor C that will result in a peak to peak ripple of 4V is

41.67

÷ ✓ μF

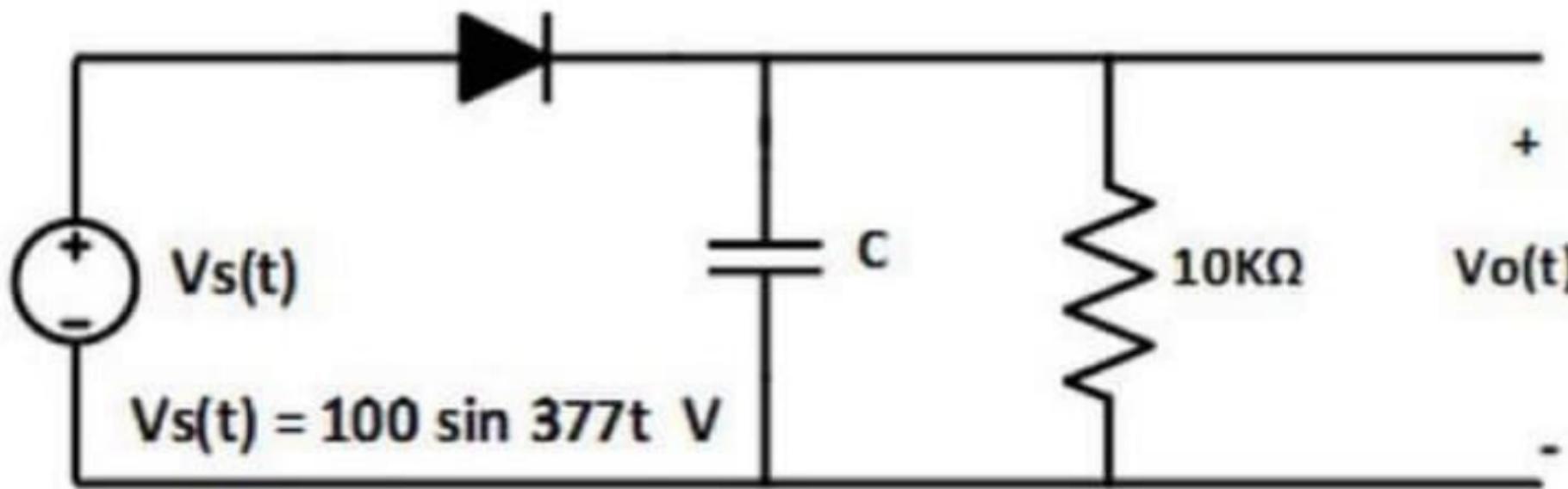
Ideal diode



For the circuit shown, the value of the capacitor C that will result in a peak to peak ripple of 1V is

• μF

Ideal diode



The diodes in the circuit shown have $V_K = 0.7V$

$I_x =$ mA

