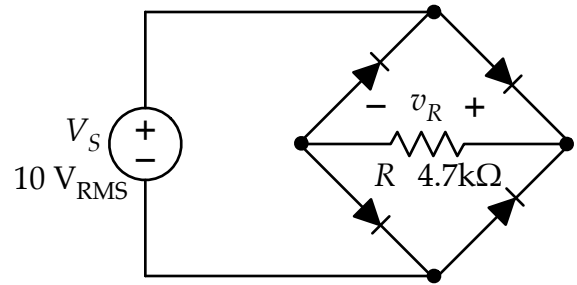


A full-wave rectifier circuit is shown at right. The source is a sinusoidal with a frequency of 60 Hz.



(a) What will be the peak value of the rectified voltage waveform?

$$v_R(\text{peak}) = \underline{\hspace{2cm}}$$

b) If a capacitor is placed in parallel with the resistor to make a peak rectifier, what value should it have in order to keep the ripple voltage to less than 5% of the peak of the peak value?

$$C = \underline{\hspace{2cm}}$$

c) For the capacitor chosen in part (b), what will be the average voltage across the resistor?

$$v_R(\text{average}) = \underline{\hspace{2cm}}$$