1.
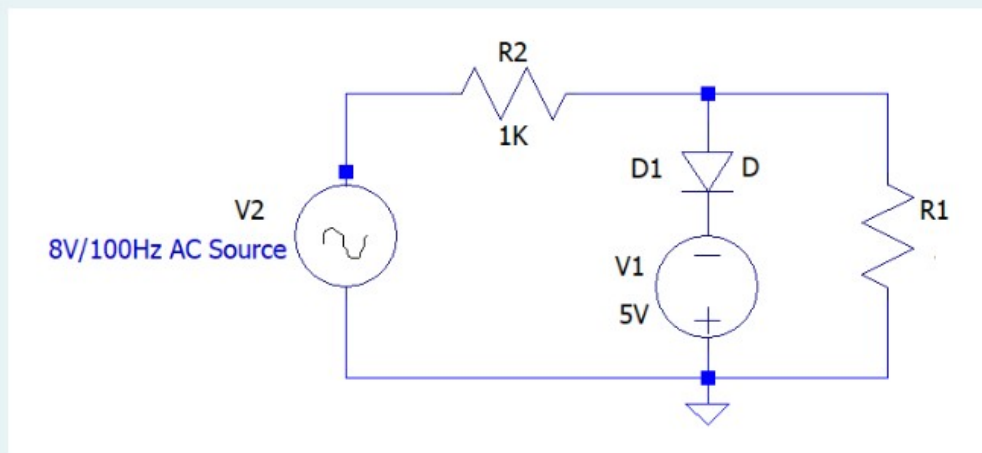

The peak clipper circuit given above has a Load resistor R1 is 91 KΩ.
What is the magnitude of peak-to-peak load current variation ?
Use Si diode near-ideal diode model for your calculations.
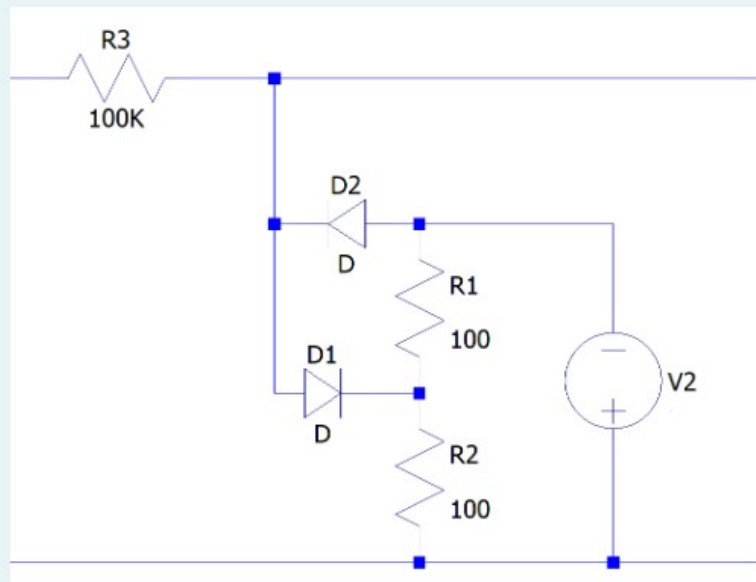Give your answer accurate to **two decimal places** in **Microamperes(μA)**

Answer:

2.

An input of 5V/50Hz is applied to a half wave rectifier operating with a load of 403 Ω. The Silicon rectifier diode has a forward resistance of 10 Ω. Find the peak current through the load in **mA**. Enter your answer to **two decimal places** of accuracy.

Answer: 15.43 mA

3.

AC 230V/50Hz is applied to the input of the above circuit.
If V2 is 190 V DC Source, What is the magnitude of peak-to-peak output voltage variation in the dual peak clipping circuit given above?
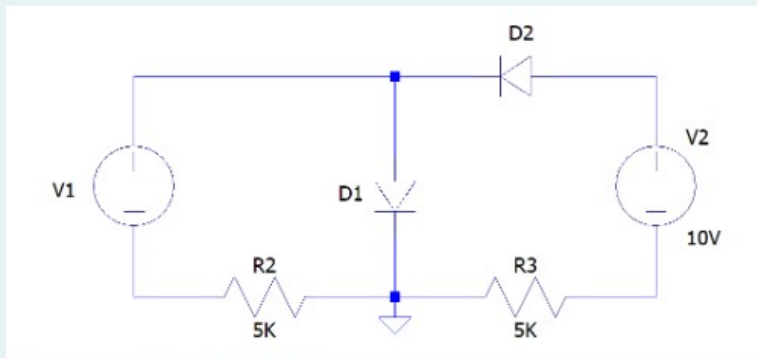Use Si diode near-ideal model to represent each diode,
Give your answer in **Volts,** correct to **two decimal places** of accuracy.

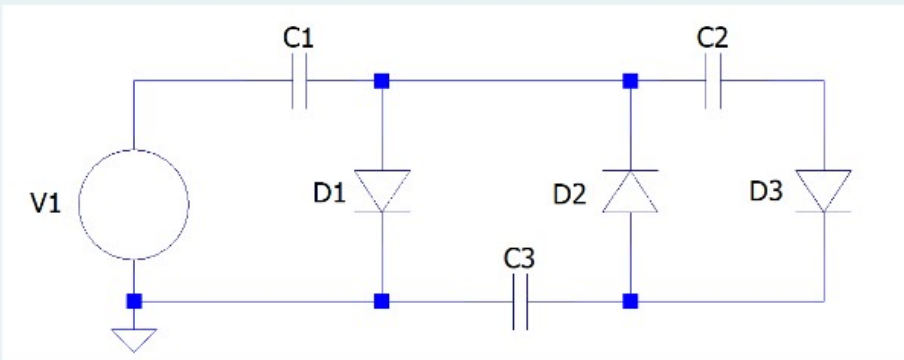Answer: 96.4v

4.

Voltage source V1 is set to 7 Volts.
What is the current through diode D1?
Use near-ideal diode model for your calculations.
Give your answer accurate to **two decimal places** in **Milliamperes**.

Answer:

5.

V1 is a 159V/50Hz AC source.

What is the magnitude of the DC voltage that appears across the C3 capacitor in **Volts**?
Use Si diode near-ideal diode model to represent each diode.
Give your answer correct to **two decimal places.**

Answer: