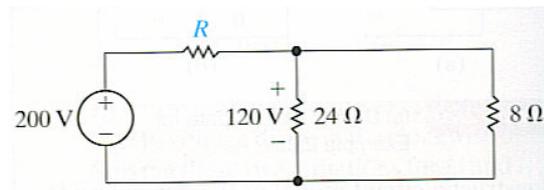


KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
ELECTRICAL ENGINEERING DEPARTMENT
EE-201 ELECTRIC CIRCUITS
Dr. Ibrahim O. Habiballah

Sec: 9 Quiz # 1 Ser. # Name:

I.D.#

For the circuit shown below, find the value of the resistor "R".



Solution:

By KCL and Ohm's Law

$$i_R = 120/24 + 120/8 = 20 \text{ A}$$

By KVL

$$200 = R(20) + 120$$

$$R = 4 \text{ Ohm}$$