

# Electricity: DC Circuits

⚠ This is a preview of the draft version of the quiz

Started: Nov 4 at 10:56am

## Quiz Instructions

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### Question 1

1 pts

The flow of charge is called \_\_\_\_\_ and \_\_\_\_\_ is the reason that charges flow.

- resistance, current
- current, potential difference
- potential difference, resistance
- current, resistance

### Question 2

1 pts

What is the amps of current in a simple circuit with a total resistance of 6 ohms connected to a 12 V battery?

- 6

72 12 2**Question 3****1 pts**

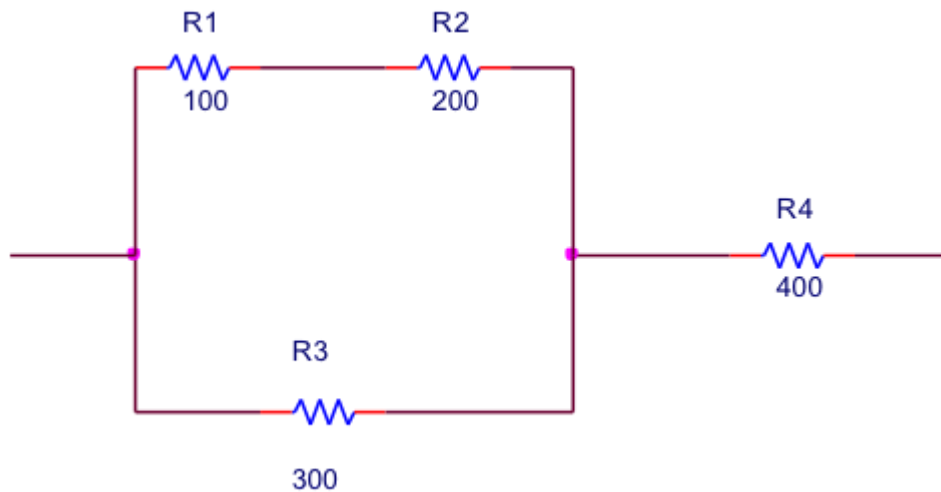
What is the equivalent resistance if three 12 ohm resistors are connected in series? What is it if they are connected in parallel?

 36 ohms, 4 ohms correct 36 ohms, 12 ohms 4 ohms, 36 ohms 12 ohms, 36 ohms**Question 4****1 pts**

A 2ohm resistor is connected to a 9V battery. What will happen to the current in the circuit if the resistance is doubled?

 the current stays the same the current is doubled

- the current is halved
- the current is quadrupled

**Question 5****1 pts**

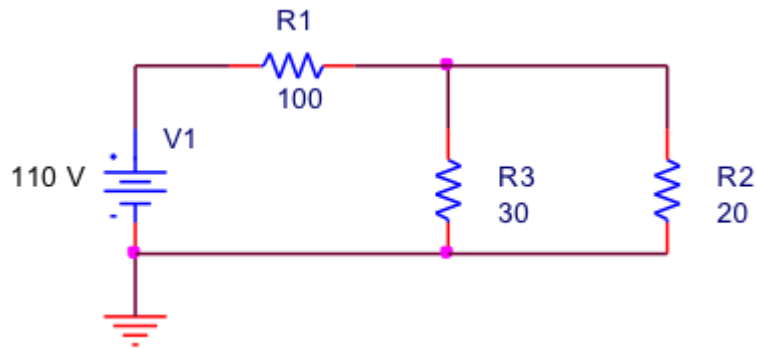
What is the equivalent resistance in ohms of the resistors above?

- 750
- 550
- 320
- 1000

**Question 6****1 pts**

Three resistors,  $10\Omega$ ,  $15\Omega$  and  $20\Omega$ , are connected in series across a  $12\text{V}$  electric potential difference. What is the voltage drop across the  $15\Omega$  resistor?

- 16
- 12
- 6
- 4

**Question 7****1 pts**

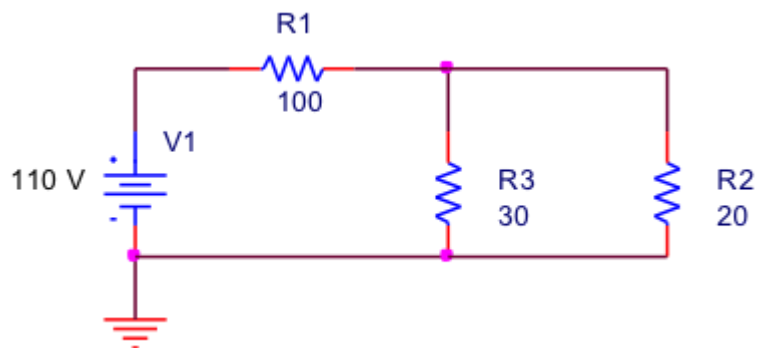
What is the current in amps coming out of the battery?

- 1.223

- .345
- .777
- .392

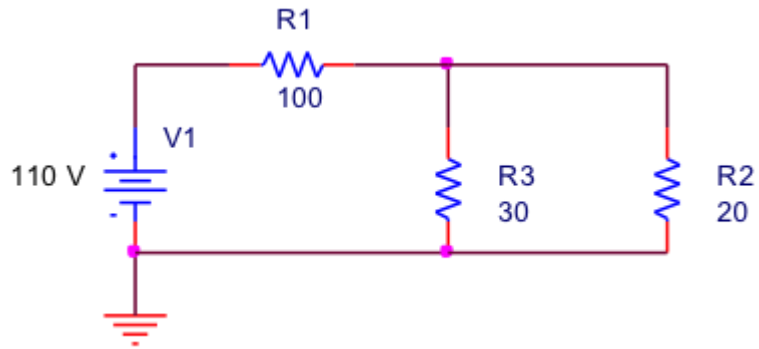
**Question 8****1 pts**

What is current in amps through the 30Ω resistor?



- .392
- .958
- .777
- .333

**Question 9****1 pts**

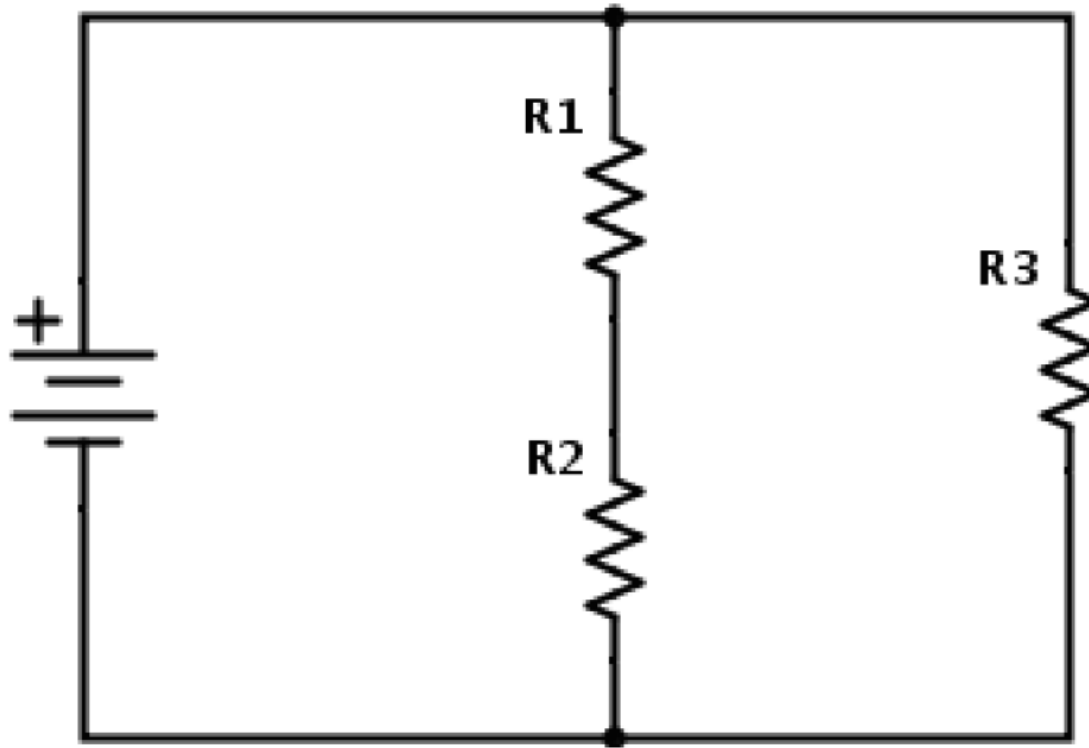


The 20Ω resistor is removed from the circuit and that branch is left disconnected. What is the new current in amps through the 30Ω resistor?

- .555
- .846
- .777
- .392

**Question 10**

**1 pts**

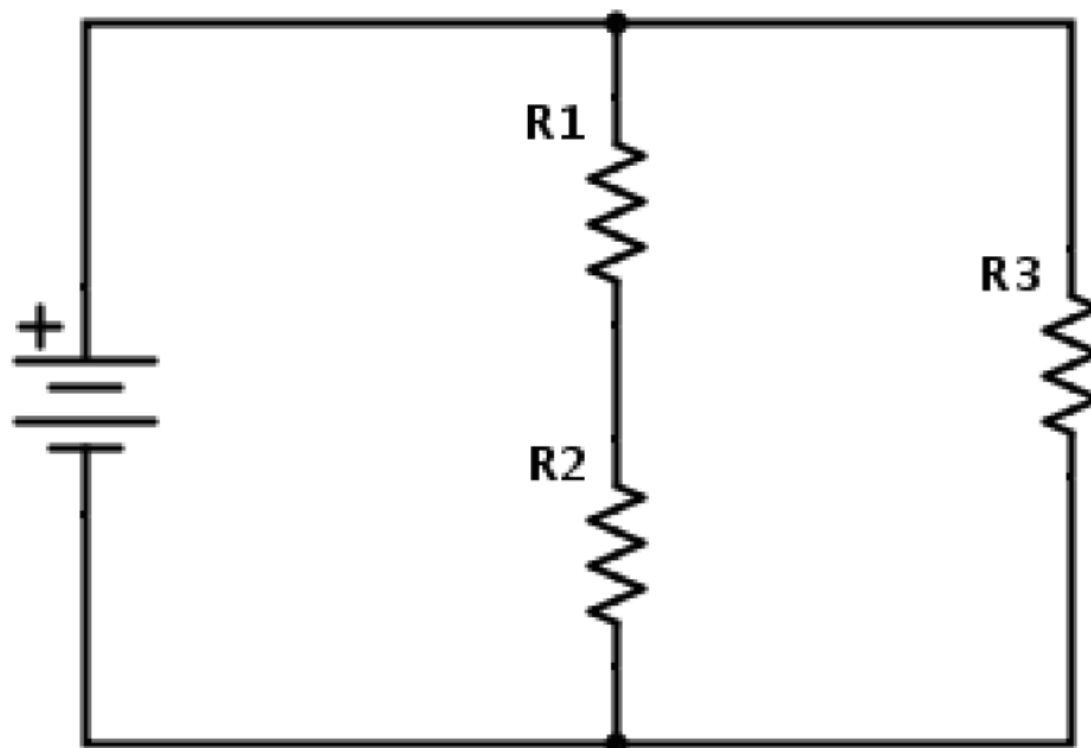


Three lightbulbs with resistance  $R_1=100\ \Omega$ ,  $R_2=100\ \Omega$  and  $R_3=300\ \Omega$  are connected to a 110 V source. Which of the following statements best describes what will happen if the lightbulb at  $R_1$  burns out?

- R2 and R3 will both burn brighter
- R2 will burn brighter and R3 will dim.
- R2 will not light and R3 burn the same as before
- R2 will not light anymore and R3 will burn brighter

## Question 11

1 pts



What is the current in amps through R2 when all three bulbs are burning?

- .33
- .66
- .55
- .11



Not saved

Submit Quiz