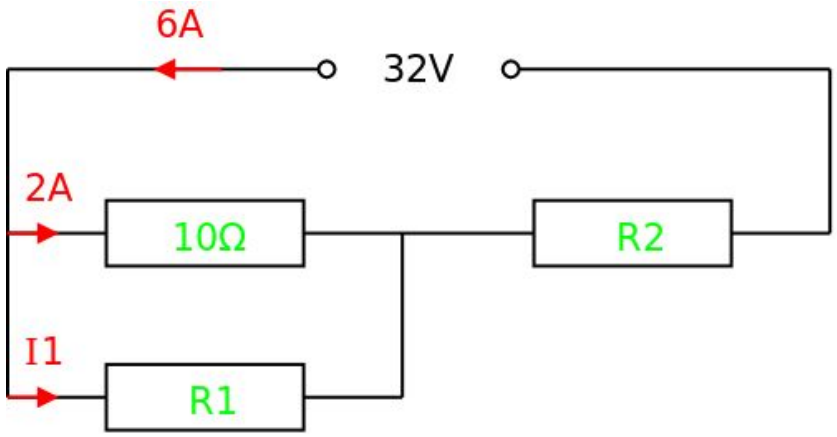
Resistance Questions

The diagram shows a power supply connected to a simple circuit made from three resistors.



Use the information on the circuit diagram to answer questions 1 to 7 below.

Question 1

What is the potential difference across the 10 Ω resistor?

A: 32 V
B: 20 V
C: 16 V
D: 5 V

Question 2

What is the current I1 flowing into resistor R1?

A: 6 A
B: 4 A
C: 3 A
D: 2 A

Question 3

What is the potential difference across resistor R1?

A: 20 V
B: 16 V
C: 8 V
D: 4 V

Question 4

What is the value of resistor R1?

A: 20 Ω
B: 10 Ω
C: 5 Ω
D: 4 Ω

Question 5

What is the potential difference across resistor R2?

A: 32 V
B: 20 V
C: 16 V
D: 12 V

Question 6

What is the current flowing through resistor R2?

A: 6 A
B: 4 A
C: 3 A
D: 2 A

Question 7

What is the value of resistor R2?

A: 10 Ω
B: 5 Ω
C: 3 Ω
D: 2 Ω

Question 8

A potential difference of 9 V causes a current of 0.2 mA to flow in a resistor. What is the value of the resistor?

A: 45 kΩ
B: 18 kΩ
C: 45 Ω
D: 18 Ω

Question 9

There is a potential difference of 0.5 V across a 500 Ω resistor. What current flows through the resistor?

A: 1 A
B: 0.1 A
C: 0.01 A
D: 0.001 A

question 10

A current of 20 mA flows through a 4.7 kΩ resistor. What is the applied potential difference?

A: 94,000 V
B: 94 V
C: 0.24 V
D: 0.094 V

Answers

1. B
2. B
3. A
4. C
5. D
6. A
7. D
8. A
9. D
10. B

Website

http://www.pfnicholls.com/Electronics_Resources/QuestionIndex.html

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