

Electric Current Problems

1. If the current in a wire is measured to be 5 A, how much charge passes by a point in the circuit every minute?

1) _____

2. The filament of a light has 1250 C of charge flow through it in 20 min. What is the current in the filament?

2) _____

3. What is the current in a wire if 63×10^{-4} C of charge passes by a point in 5 seconds?

3) _____

4. A load has a current of 60 mA flow through it. What quantity of charge flows through the load in 80 s?

4) _____

5. How long does it take 50 C of charge to pass by a point if the current in the circuit is 0.89 A?

5) _____

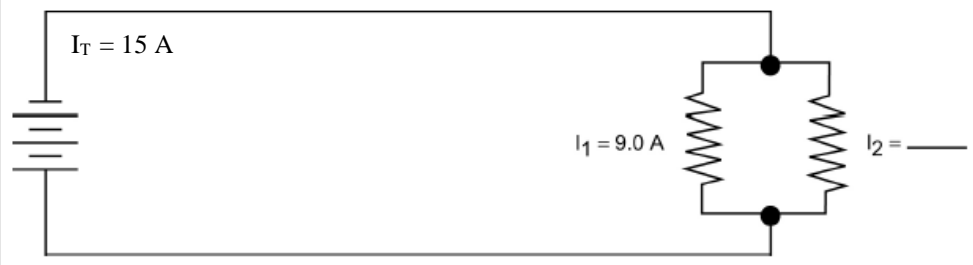
6. a) If the current in a wire is measured to be 3 A, how much charge passes by a point in the circuit every minute?

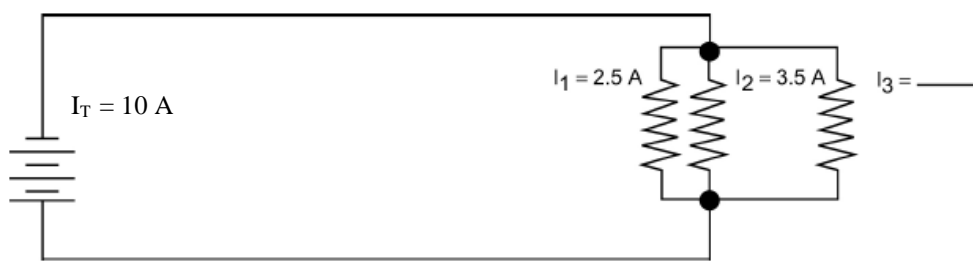
6) _____

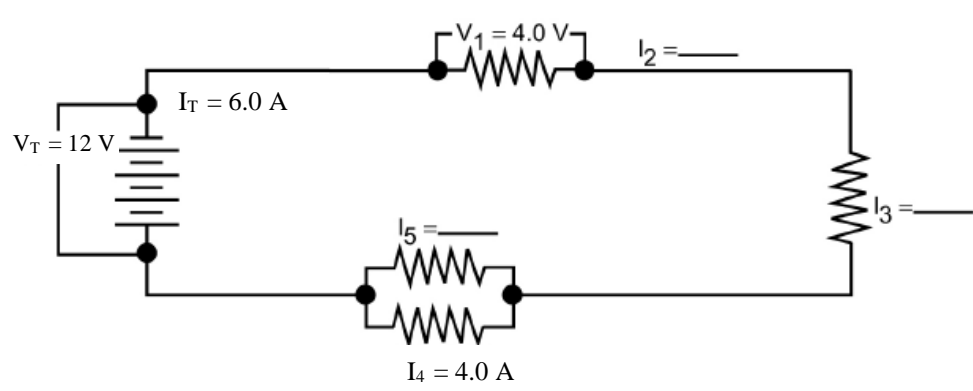
BONUS b) How many electrons is this? (1 C = 6.25×10^{18} electrons)

Calculate the Current

Calculate the current in each of the following circuit diagrams. The current at the source is represented by I_T

	<p>1. $I_2 =$ _____</p>
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	<p>2. $I_3 =$ _____</p>
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	<p>3. $I_2 =$ _____</p> <p>$I_3 =$ _____</p> <p>$I_5 =$ _____</p>
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