

# Automotive

## Section II (continued)

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### Question 19 (7 marks)

- (a) Why is it recommended that the earth lead be removed first and replaced last when disconnecting or connecting an automotive battery? 1

So you dont short circuit it  
and to prevent any sparks that may  
cause the battery to explode

- (b) What does CCA refer to in an automotive battery? 1

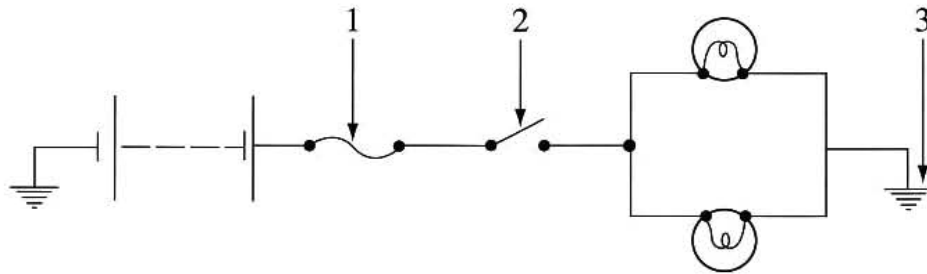
Cold cranking Amps how much draw  
the battery can give.

Question 19 continues on page 14

Question 19 (continued)

(c) This diagram shows some components in an electrical circuit.

3

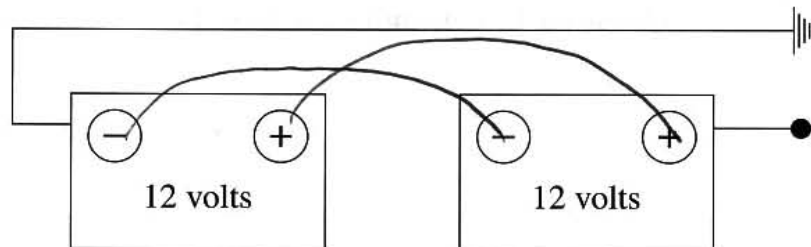


Complete the table naming and describing the function of each numbered component.

Component	Name	Function
1	<i>Fuse</i>	<i>to prevent too much current flow</i>
2	<i>Open Switch</i>	<i>to open and close the circuit.</i>
3		

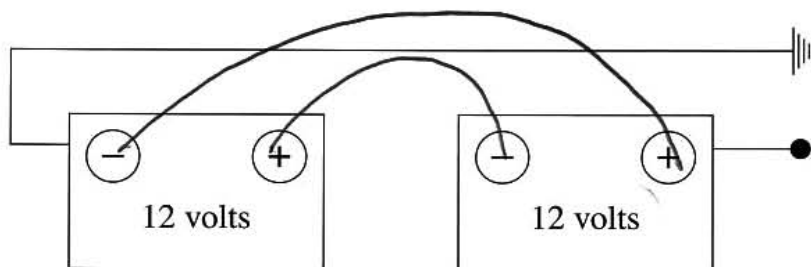
(d) In the diagram below, draw lines to show how to connect the terminals to increase battery output voltage to 24 volts.

1



(e) In the diagram below, draw lines to show how to connect the terminals to maintain battery output voltage at 12 volts.

1



**End of Question 19**