

# 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 do not earth it out while  
trying to work on it doing so  
will result in blown fuses

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

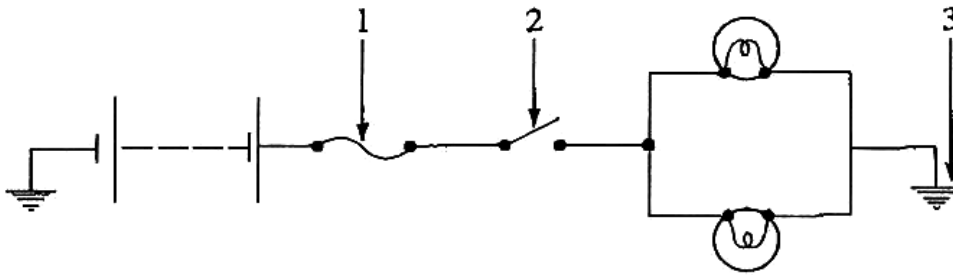
Cold Cranking Amps

Question 19 continues on page 14

Question 19 (continued)

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

3

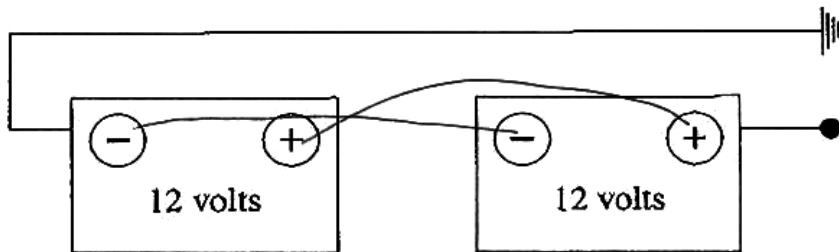


Complete the table naming and describing the function of each numbered component.

| Component | Name  | Function                            |
|-----------|-------|-------------------------------------|
| 1         |       |                                     |
| 2         |       |                                     |
| 3         | Earth | Give or complete circuit give earth |

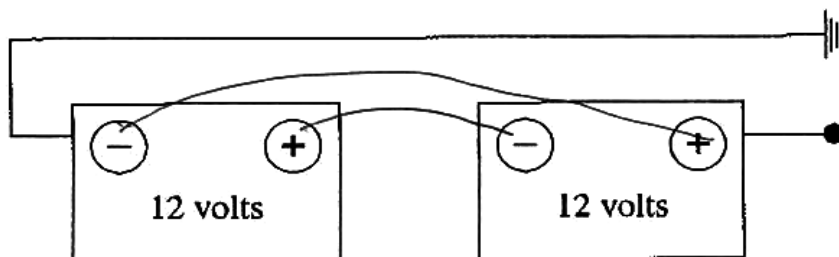
(d) In the diagram below, draw lines to show how to connect the terminals to increase battery output voltage to 24 volts.

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