4 Data is transmitted between a computer and a printer.

(a) The data is transmitted one bit at a time down a single wire. The computer can transmit data to the printer and the printer can transmit data to the computer, using the same connection.

Circle the **two** data transmission methods that will transmit data in this way.

parallel full-duplex parallel half-duplex parallel simplex

serial full-duplex serial half-duplex serial simplex

[2]

(b) An odd parity check is used to detect errors in the data transmission.

Explain how the odd parity check detects errors.

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..... [4]

(c) Another error detection method sends the data from the computer to the printer, then a copy of the data received is sent back from the printer to the computer. The two sets of data are compared to see if they match.

State the name of this type of error detection method.

..... [1]