

(iii) Use an appropriate test (justifying your choice) to explore whether there are significant differences in the average changes in triglyceride level between people taking halofenate and people taking a placebo. State your conclusions.

[3]

- (d) Many studies have shown that people tend to have higher levels of beta-endorphin in their blood under conditions of emotional stress. For 19 patients who were about to undergo surgery, blood samples were taken (a) 12–14 hours before surgery and (b) 10 minutes before surgery. The resulting data are stored in the data set `stress` in the SSC subdirectory. (You might want to use `??stress` to find out a little more about these data.)

You are asked to explore this data set, to investigate the following questions.

- Do the data support the hypothesis that increased stress leads to higher levels of beta-endorphin?
- If so, can you quantify the increase under the circumstances of this study?

This part of the question is intended to be somewhat open-ended, but you are not expected to spend hours on it, and your answer should not take up more than about $1\frac{1}{2}$ sides of A4 paper, including any graphs.

[6]