Name: Huy Minh Dinh

Student Number: 7360174

MATH255 – Autumn 2023 Computer Lab – Week 13

1.

(a)

We can formulate the null and alternative hypotheses as follows:

H_0: The mean of the first-visit levels is equal to 7.5.

$\rightarrow H_0 = 7.5$

H_1: The mean of the first-visit levels is not equal to 7.5.

$\rightarrow H_1 \neq 7.5$

(b)

Because of the 'is not' in the alternative hypothesis, we have to consider both possibility that the mean of the first-visit levels is greater than 7.5 and less than 7.5. This means we have to use a two-tailed test.