Problem 6 /12

This problem refers to the `optical` data set, available on Moodle. This set represents a random sample of 43 patients at an optometry clinic. In this problem, we are interested in the `eye_difference` variable. Positive values indicate greater weakness in the left eye.

(a) Construct a level 90% confidence interval for `eye_difference` in the population from which this sample was drawn using *direct calculation*. Identify the point estimate, margin of error, and interval endpoints. Make sure your work is clear.

(b) Confirm the results of part (a) with a single line of R code. Include both code and output.

(c) Write a sentence or two interpreting your result using the language from class. Your answer should say something about which eye, if either, tends to require greater correction.