

1. Siva decides suddenly that fairness is important when it comes to grading. He mandates that each quiz is graded twice by Prashant and Ishan. The data is as follows

Prashant	:	30	0	50	22	55	50	55	40	44	60
Ishan	:	20	10	40	11	44	30	33	20	33	60

- (a) Using the `t.test`, perform the paired t-test to see if the scores are statistically different.
- (b) Suppose we assume that two sets of students are independent, decide if the scores are statistically different.
2. We are given two dice. We roll each of them 500 times and the outcomes are summarised below.

Dice 1							Dice 2								
Top Face	:	1	2	3	4	5	6	Top Face	:	1	2	3	4	5	6
Number	:	77	89	76	84	80	94	Number	:	50	199	102	52	44	53

- (a) Using the inbuilt `chisq.test`, decide if Dice 1 is fair or not. Describe each output of the command. Please explain all the inferences you can make from the output.
- (b) Using the inbuilt `chisq.test`, decide if Dice 2 is fair or not. Describe each output of the command. Please explain all the inferences you can make from the output.
- (c) Using the inbuilt `chisq.test`, decide if Dice(s) appear to be have the same distribution. Describe each output of the command. Please explain all the inferences you can make from the output.