Hypothesis Test for the SRCC
Test Statistic

1. Calculate the test statistic for the following data pairs

   a.

X	1	2	3	4	5	6	7	8	9
Y	5	8	9	6	7	4	2	3	1

   b.

X	10	12	14	16	18	20	22	24	26	28	30	32	34
Y	13	10	9	11	12	7	8	6	5	4	2	1	3

   c.

X	18.4	17.2	16.9	15.4	16.3	19.7
Y	8	10	14	12	16	11

   d.

X	15	19	20	21	24	24	28	32	33	35	38
Y	64	67	62	65	68	64	63	60	61	64	66

2. The number of marshmallows added to a cookie (x) and the rank of each cookie decided by Nanny Ivy (where 1 is the best and 9 is the worst) is recorded below.

x	12	10	8	14	9	10	7	8	10
y	1	2	3	4	5	6	7	8	9

   Calculate the test statistic for the data

3. The overnight temperature and % cloud cover is recorded for 10 locations in the UK and the data is presented below

Location	Min Temp	% cloud Cover
Plymouth	-4	54
Portsmouth	-2	56
Cardiff	-8	67
Birmingham	0	49
Middlesbrough	-1	50
Ipswich	0	57
Nottingham	2	42
Manchester	3	45
Liverpool	2	51
Edinburgh	-6	39

   Calculate the test statistic for the data

4. The position a contestant completed the competition along with the number of trial they had to endure is recorded on the table below

P	14	13	12	11	10	8.5	8.5	7	6	4.5	4.5	3	2	1
T	3	0	2	1	5	9	7	5	10	6	8	5	7	7

   Calculate the test statistic for the data