

Chi-squared Tests – 2022 GCE AS Statistics Further Mathematics A**1. June/2022/Paper_Y532/01/No.4**

A school pupil keeps a note of whether her journeys to school and from school are delayed. The results for a random sample of journeys are shown in the table.

	Direction of journey	
	To school	From school
Delayed	64	56
Not delayed	74	106

Test at the 10% significance level whether there is association between delays and the direction of the journey. [7]

2. June/2022/Paper_Y532/01/No.2

Eight runners took part in two races. The positions in which the runners finished in the two races are shown in the table.

Runner	A	B	C	D	E	F	G	H
First race	3	1	5	6	2	8	7	4
Second race	4	3	8	7	2	5	6	1

Test at the 5% significance level whether those runners who do better in one race tend to do better in the other. [7]