

There are three bus companies in a city. The council is investigating whether the buses reliably arrive at their destination on time. The results from random samples of buses from each company are summarised in the following table.

		Bus company			
		<i>A</i>	<i>B</i>	<i>C</i>	Total
Arrival	Early	22	22	10	54
	On time	30	52	42	124
	Late	28	26	18	72
Total		80	100	70	250

Test, at the 5% significance level, whether the reliability of buses is independent of bus company. [7]