Question 6   **(7 marks)**

Before a fitness campaign at a high school started, 50 students were chosen at random from each year group and asked the following questions:

Question 1: Which one of the following modes of transport do you use to travel to and from school?

Category A: walking/cycling
Category B: public transport
Category C: private car

Question 2: Which year group are you in?

The campaign organisers wished to determine whether age group affected the students' likelihood of walking/cycling to and from school.

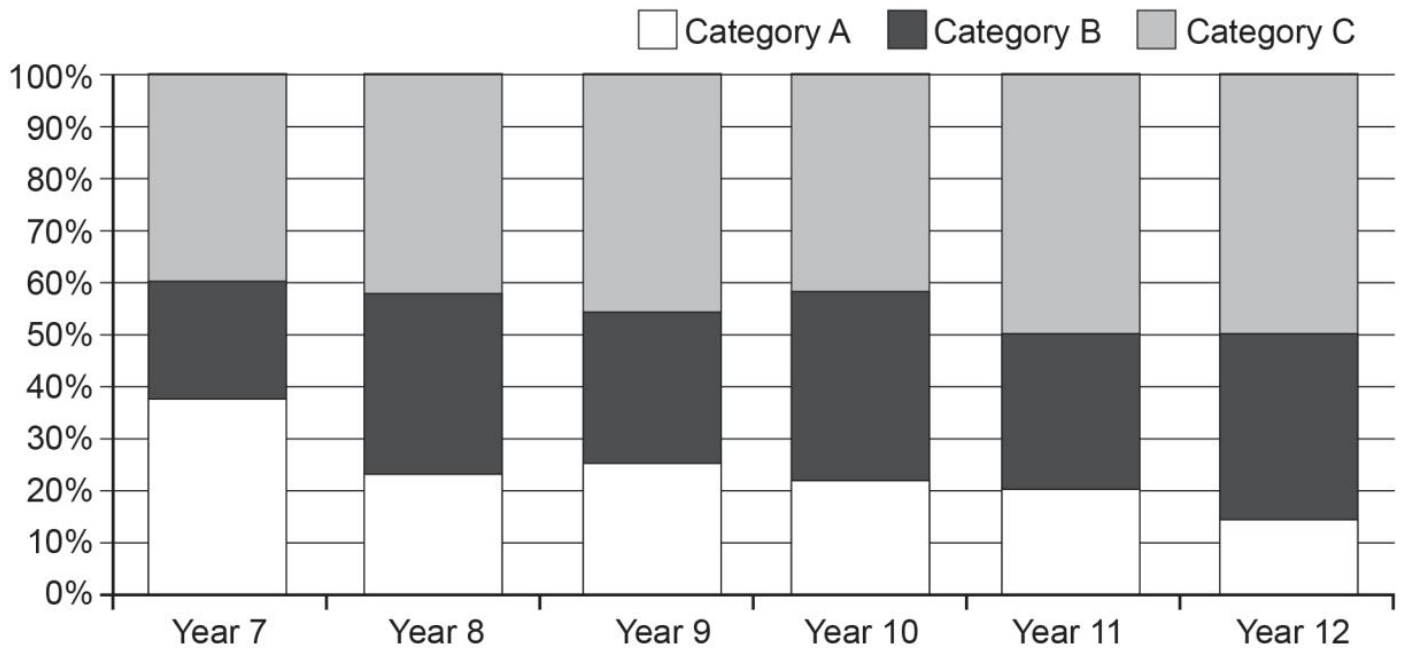The results of the survey are shown in the table below.

	Category A	Category B	Category C	Total
Year 7	19		20	50
Year 8	12	17	21	50
Year 9	13	14	23	50
Year 10	11		21	
Year 11	10	15	25	50
Year 12	8	17	25	50
Total	73		135	300

(a)   Complete the missing entries in the table above.   (2 marks)

(b)   Compare the percentages of students in Year 7 and Year 12 who use Category A as a
       mode of transport and comment on your results.   (2 marks)

The data given in the table for part (a) have been displayed as a divided column graph below.

(c)   Using the graph above or another method, comment on:

   (i)   the association between 'Year group' and 'Category A'.   (1 mark)

   (ii)   the association between 'Year group' and 'Category C'.   (1 mark)

(iii)   the association between 'Category A' and 'Category B and C combined'.   (1 mark)