

Question 2**(9 marks)**

A computer repair shop recorded the number and types of complaints received from its customers regarding laptop computers with different purchase prices.

		Purchase price			Total
		Under \$1000	From \$1000 to \$1500	More than \$1500	
Complaints	Battery failure	50	50	16	
	Overheating	25			85
	Update failures		70	12	112
	Viruses	45		38	117
	Total	150	200	80	430

(a) Complete the two-way table above. (3 marks)

(b) The manager of the computer repair shop believes that the purchase price of the laptop computers is being explained by the number and type of complaints.

(i) State why this belief is incorrect. (1 mark)

(ii) Identify the response variable for these data. (1 mark)

- (c) The incomplete two-way percentaged table is shown below.

		Purchase price			Total
		Under \$1000	From \$1000 to \$1500	More than \$1500	
Complaints	Battery failure	33.3	25	20	
	Overheating	16.7		17.5	
	Update failures				
	Viruses				
	Total				

- (i) Complete the table above by using either row percentages **or** column percentages, as appropriate. (3 marks)
- (ii) State an association that can be observed from the completed two-way percentaged table above. (1 mark)