Homework 4/2

04 February 2020 15:14

Question 4 **(Suggested maximum time: 15 minutes)**

90 students were asked whether they had ever been to three of Ireland's most popular tourist attractions: Newgrange (N), the Cliffs of Moher (C) and the Giant's Causeway (G).

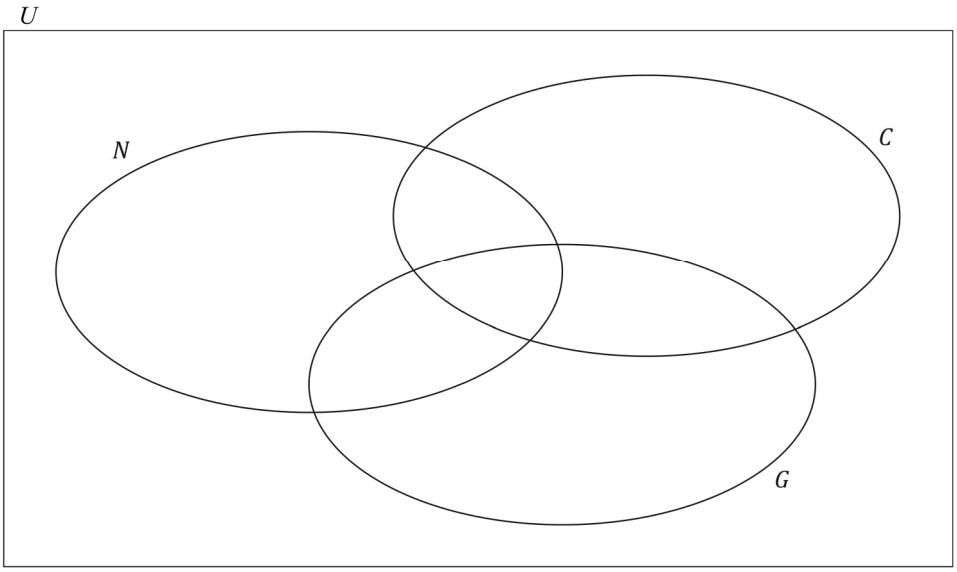
38 students had been to Newgrange.
49 students had been to the Cliffs of Moher.

7 students had been to the Giant's Causeway only.
5 students had been to all three of the attractions listed.
10 students hadn't been to any of the attractions listed.

12 students had been to the Giant's Causeway and Newgrange.
14 students had been to the Giant's Causeway and the Cliffs of Moher.

x students had been to the Cliffs of Moher and Newgrange but **not** the Giant's Causeway.

(a) Use this information to fill in the Venn diagram below, in terms of x.



(b) Find the value of x.

(c) Find the **probability** that a student chosen at random from the group had been to the Giant's Causeway.

(d) Find the **probability** that a student chosen at random from the group had been to **at least one** of the tourist attractions.

(e) Find the **probability** that a student chosen at random from the group had been to **only two** of the tourist attractions.

(f) What type of data was collected during the survey? Tick **two** boxes only.

Numerical		Nominal		Discrete	
Categorical		Ordinal		Continuous	