Basic Statistics Practice #4

1.   The religion of a group of immigrants is sampled:

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Complete a frequency table of this data, including labelling it properly, then graph it:

✾ Hindu		
☩ Christian		
☻ Confucian		
☾ Moslem		
✿ Jewish		

2.   The results of a geometry test are shown below in a frequency table.

Score	Frequency		
1	0		
2	0		
3	1		
4	2		
5	5		
6	6		
7	5		
8	4		
9	2		
10	0		
Total	**25**		

a) Find the median score   ....

b) Find the mean score   ....

c) Find the range   ....

d) Find the interquartile range ....

e) Draw a box-and-whisker graph of the data:

f) Discuss any features of the data and/or the graph

Answers: Basic Statistics Practice #4

1.   The religion of a group of immigrants is sampled

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Complete a frequency table of this data, including labelling it properly, then graph it:

		Tally	Totals
❀	Hindu	ЖЖ ЖЖ ЖЖ I	16
✝	Christian	ЖЖ I	6
☯	Confucian	ЖЖ IIII	9
☾	Moslem	ЖЖ ЖЖ	10
✡	Jewish	ЖЖ IIII	9
Total			**50**
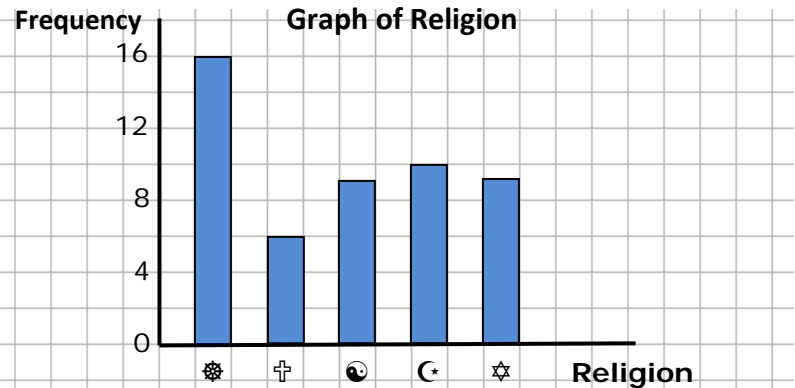
The graph should be a bar graph of some sort (gaps between bars) but can also go sideways. Not a histogram, because the data is by category, and not a line graph as it is not over time or showing any sort of trend.

2.   The results of a geometry test are shown below in a frequency table.

Score	Frequency	Cumulative	Total
1	0	0	
2	0	0	
3	1	1	3
4	2	3	2 × 4 = 8
5	5	8	5 × 5 = 25
6	6	14	6 × 6 = 36
7	5	19	5 × 7 = 35
8	4	23	4 × 8 = 32
9	2	25	2 × 9 = 18
10	0		
Total	**25**		**157**

This represents scores of: 3, 4, 4, 5, 5, 5, 5, 5, 6, 6, 6, 6, 6, 6, 7, 7, 7, 7, 7, 8, 8, 8, 8, 9, 9

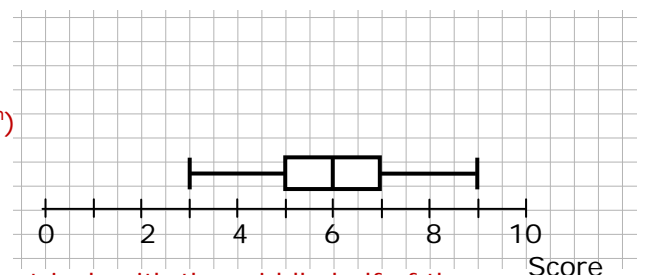   a) Median   **6**   (25 values, so the median is the 13th one)

   b) Mean   **6.28** (157 ÷ 25)

   c) Range   **6**   (9 to 3)

   d) IQR   **2**   (7 to 5, 19th/20th to 6th/7th)

   e) Draw a box-and-whisker graph of the data:

   f) The distribution (spread) of scores is very symmetrical, with the middle half of them being between 5 and 7. There are no unusual features.