Weight Loss

Three weight loss programmes were studied by health students. The programmes were "Fat Losers", "Tub Off" and "Lighter Now!".

They followed twenty-four overweight participants over a three month period. At the end of the time the amount of weight lost for each participant, in kilograms, were recorded as:

Fat Losers	0.4	0.5	2.1	2.8	2.9	2.9	3.1	3.4	3.4	3.6	3.8	4.5
	4.6	4.9	5.1	5.2	5.5	5.6	5.7	6.7	6.8	7.4	7.4	7.8

Tub Off	-1.2	-0.8	-0.2	0.5	0.6	1.8	2.4	2.8	2.9	3.9	4.5	5.1
	5.9	6.0	6.1	6.5	6.8	7.6	7.9	8.2	9.8	9.9	X	X

Lighter-Now!	0.4	3.1	3.3	4.3	4.8	5.3	5.3	5.4	5.5	5.5	5.8	5.8
	6.1	6.2	6.4	6.4	6.5	6.8	7.0	7.9	8.4	8.6	8.6	X

An "X" marks participants that withdrew from the study.

1. Write a question that the health students might be able to answer with the data.

2. Calculate the mean, median, quartiles and confidence intervals for the data.

3. Select an appropriate type of graph for your question and draw it.

4. Answer your question using your graph and calculated statistics.

5. Describe how the results of the programmes differ, and what this might mean to someone trying to lose weight.

6. Describe what other information you might need to know to determine how accurate the study is.

7. How might the study be improved?