

**Exercise 1**

Calc. : ✓

Australian biologist, Professor Fry, conducted a study on the length of the Golden Lancehead viper, a venomous snake, living on Snake Island in Brazil. He measured the length size of a sample of snakes and recorded his data into the following table. (Length values in table were rounded to the nearest cm).

Length (cm)	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89
Frequency	20	31	52	56	65	68	72	90	80	82	38	19	12	9	6

1. Calculate the mean, median, mode and range for this data set. 2 marks
2. Calculate Q1 and Q3 for this data set. 2 marks
3. Calculate the standard deviation for this data set. 1 mark
4. Give an interpretation of the standard deviation. 2 marks
5. What percentage of the snakes measured 80 cm? 2 marks
6. What percentage of the snakes measured less than 80 cm? 2 marks