2. A sports teacher recorded the number of press-ups done by his students in two minutes. He recorded this information for a Year 7 class and for a Year 11 class.

The back-to-back stem and leaf diagram shows this information.

Totals	Year 7 class		Year 11 class	Totals
(6)	8 7 6 5 5 4	1		
(10)	9 7 7 6 5 4 4 4 2 2	2	0 5 6 9	(4)
(7)	8 7 5 4 3 3 0	3	3 4 5 8 8	(5)
(5)	9 9 7 2 2	4	0 5 6 7 9	(5)
(3)	8 4 0	5	0 3 5 5 6 6 7 7 7 9 9	(11)
		6	0 3 3 3 3 4 8	(7)

Key: 2|4|0 means 42 press-ups for a Year 7 student and 40 press-ups for a Year 11 student

(a) Find the median number of press-ups for each class.

(2)

For the Year 11 class, the lower quartile is 38 and the upper quartile is 59

(b) Find the lower quartile and the upper quartile for the Year 7 class.

(2)

(c) Use the medians and quartiles to describe the skewness of each of the two distributions.

(3)

(d) Give two reasons why the normal distribution should not be used to model the number of press-ups done by the Year 11 class.

(2)

(Total for Question 2 is 9 marks)