2. The weights, to the nearest kilogram, of 35 rugby players from club A are summarised in the stem and leaf diagram below.

Weight (kg)											Totals
7	2										(1)
8	4	9									(2)
9	0	0	1	1	5	5	5	6	7		(9)
10	0	0	4	4	5	5	7	8	9	9	(10)
11	1	1	2	2	2	2	5				(7)
12	0	2	4	6	7						(5)
13	9										(1)

Key: 7 | 2 represents 72 kg

(a) Find the lower quartile and the upper quartile of the weights of these rugby players.

(2)

An outlier is defined as an observation that is

greater than $Q_3 + 1.5 \times (Q_3 - Q_1)$ or less than $Q_1 - 1.5 \times (Q_3 - Q_1)$

(b) Show that there is only one outlier for these data.

(3)

Figure 1 on page 7 shows a box plot for the weights of rugby players from club B

(c) On the same grid, draw a box plot to represent the weights of rugby players from club A

(4)

(d) Describe and interpret the skew of the distribution for **club B**, shown in Figure 1

(2)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

Question 2 continued

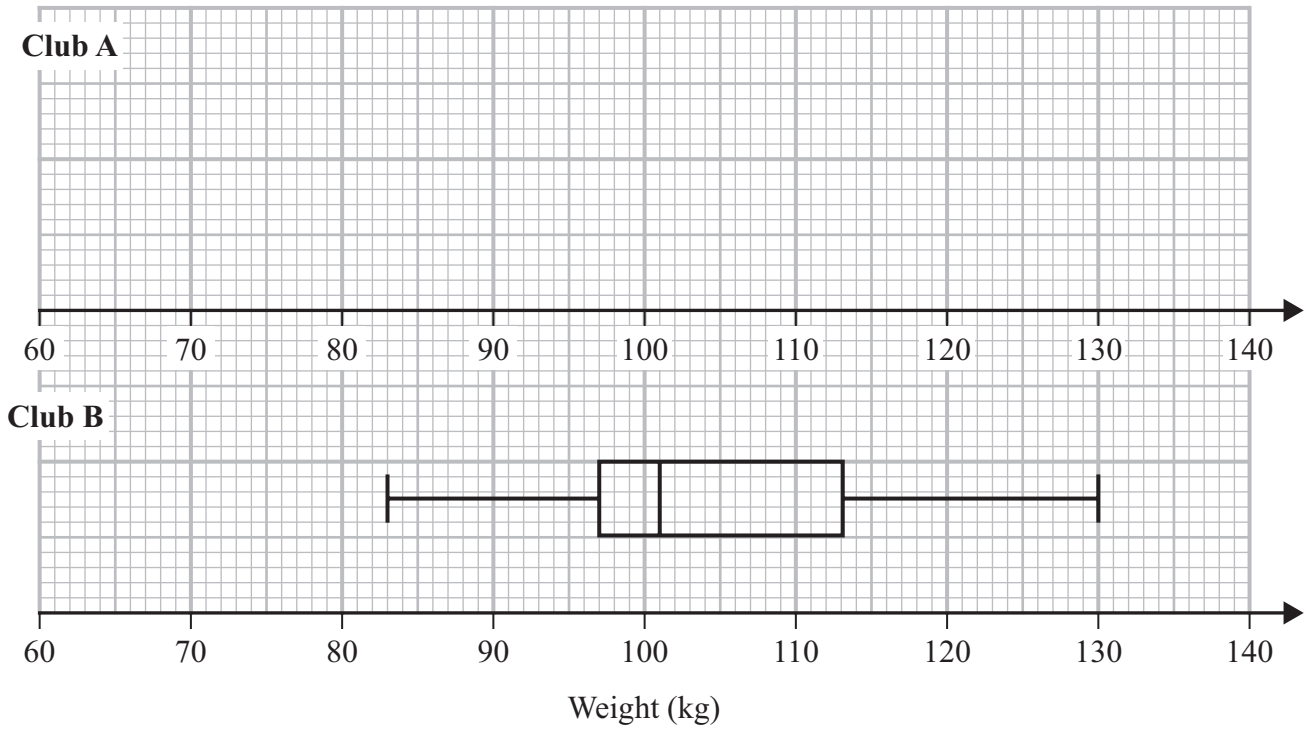


Figure 1

Turn over for a spare grid if you need to redraw your box plot.

Question 2 continued

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

Question 2 continued

Only use this grid if you need to redraw your box plot.

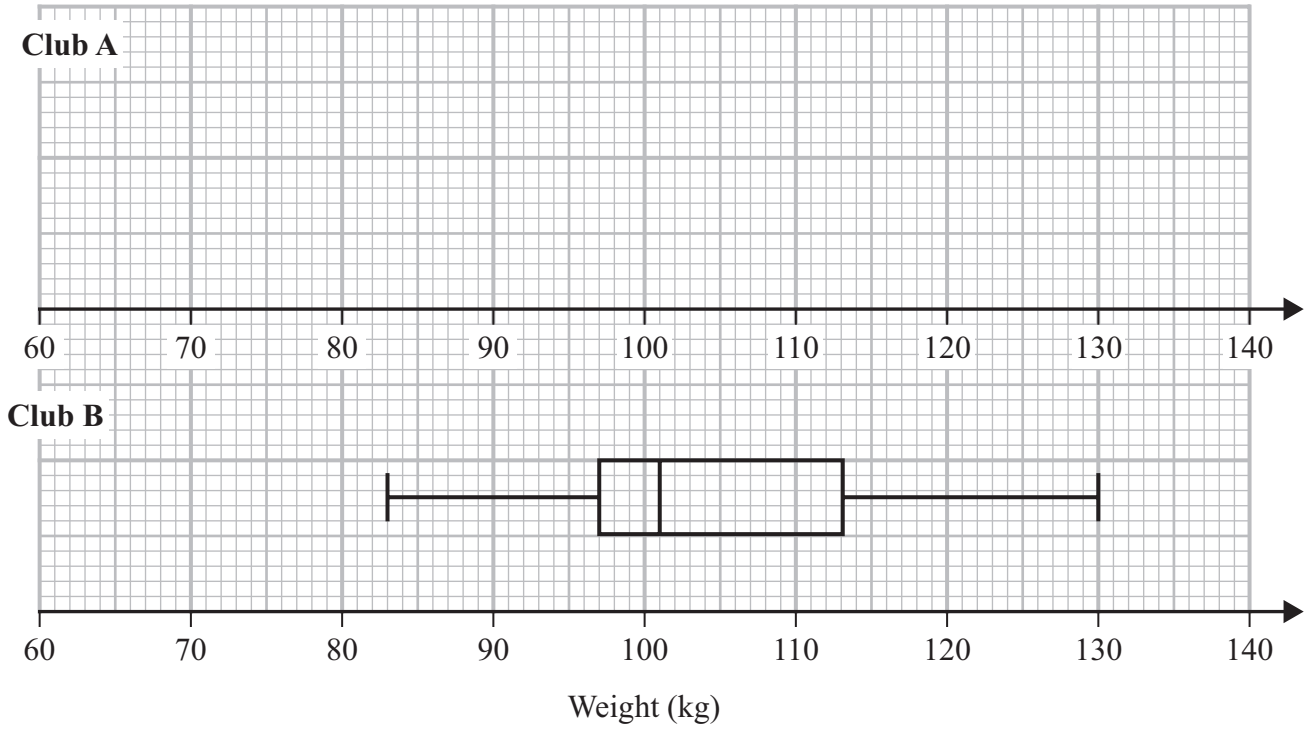


Figure 1

(Total for Question 2 is 11 marks)