1 (	a)	The list shows	15 midda	y temperatures.	in degrees	Celsius.	in Suntown.

17 21 21 18 23 22 25 19 21 17 19 18 21 24 23

(i) Complete the stem-and-leaf diagram to show this information.

1	7	
2		

Key: 1|7 represents 17 °C

[2]

(ii) Find the median.

.....°C [1]

(iii) Find the upper quartile.

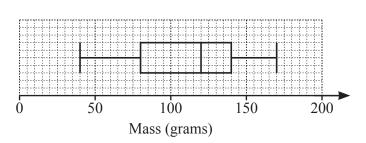
.....°C [1]

(iv) Rahul draws a pie chart to show this information.

Calculate the sector angle for the number of days the temperature is 18 °C.

.....[2]

**(b)** 



The box-and-whisker plot shows information about the masses, in grams, of some apples.

(i) Find the median.

.....g [1]

(ii) Find the range.

.....g [1]

(iii) Find the interquartile range.

.....g [1]

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**(c) (i)** The time, *t* minutes, spent on homework in one week by each of 200 students is recorded. The table shows the results.

Time (t minutes)	40 < <i>t</i> ≤ 60	$60 < t \le 80$	$80 < t \leqslant 90$	90 < <i>t</i> ≤ 100	$100 < t \le 150$
Frequency	6	10	70	84	30

Calculate an estimate of the mean.

 min	[4]
 	Г. Т

(ii) A new table with different class intervals is completed.

Time (t minutes)	40 < <i>t</i> ≤ 90	90 < <i>t</i> ≤ 150
Frequency	86	114

On a histogram the height of the bar for the  $40 < t \le 90$  interval is 17.2 cm.

Calculate the height of the bar for the  $90 < t \le 150$  interval.

 cm [	[2]