1 The table shows information about the heights of 80 teenagers.

Midpoint : $\frac{\text{upper limit - lower limit}}{2}$

Midpoint	Height (h cm)	Frequency
155	$150 < h \leqslant 160$	8
165	$160 < h \leqslant 170$	14
175	$170 < h \leqslant 180$	24
185	$180 < h \leqslant 190$	30
195	$190 < h \leqslant 200$	4

Work out an estimate for the mean height of the teenagers.

Finding total height of the teenagers:

$(155 \times 8) + (165 \times 14) + (175 \times 24) + (185 \times 30) + (195 \times 4)$

$= 1240 + 2310 + 4200 + 5500 + 780$ (1)

$= 14080$

Finding mean height of the teenagers:

$= \frac{14080}{80} = 176$ (1)

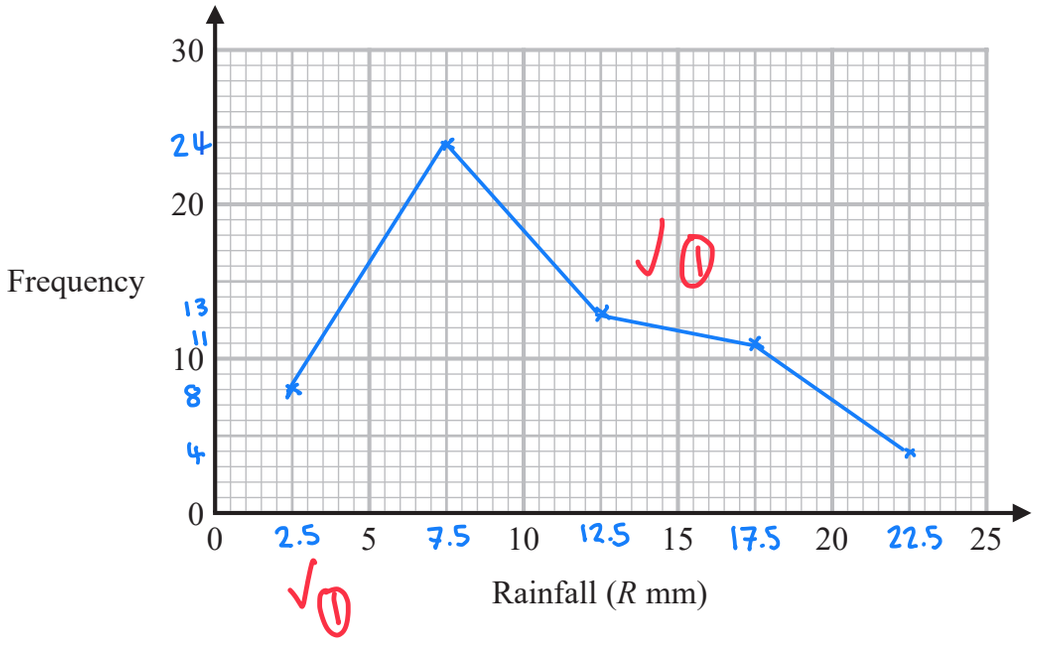
176 (1) ..... cm

(Total for Question 1 is 3 marks)

2 The table shows information about the daily rainfall in a town for 60 days.

Midpoint	Rainfall (R mm)	Frequency
2.5	$0 \leqslant R < 5$	8
7.5	$5 \leqslant R < 10$	24
12.5	$10 \leqslant R < 15$	13
17.5	$15 \leqslant R < 20$	11
22.5	$20 \leqslant R < 25$	4

Draw a frequency polygon for this information. plot midpoint and frequency



✓ ✓

(Total for Question 2 is 2 marks)