

- 1 The table shows the amount of snow, in cm, that fell each day for 30 days.

Amount of snow ( $s$ cm)	Frequency
$0 \leq s < 10$	8
$10 \leq s < 20$	10
$20 \leq s < 30$	7
$30 \leq s < 40$	2
$40 \leq s < 50$	3

Work out an estimate for the mean amount of snow per day.

frequency  $\times$  midpoint ✓ ①

$$8 \times 5 + 10 \times 15 + 7 \times 25 + 2 \times 35 + 3 \times 45$$

$$40 + 150 + 175 + 70 + 135$$

$$= 570 \quad \checkmark \text{ ①}$$

$$570 \div 30 \text{ days} = 19 \text{ mean} \quad \checkmark \text{ ①}$$

..... 19 ..... cm

(Total for Question 1 is 3 marks)

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- 2 The table shows some information about the profit made each day at a cricket club on 100 days.

Profit (£ $x$ )	Frequency
$0 \leq x < 50$	10
$50 \leq x < 100$	15
$100 \leq x < 150$	25
$150 \leq x < 200$	30
$200 \leq x < 250$	5
$250 \leq x < 300$	15

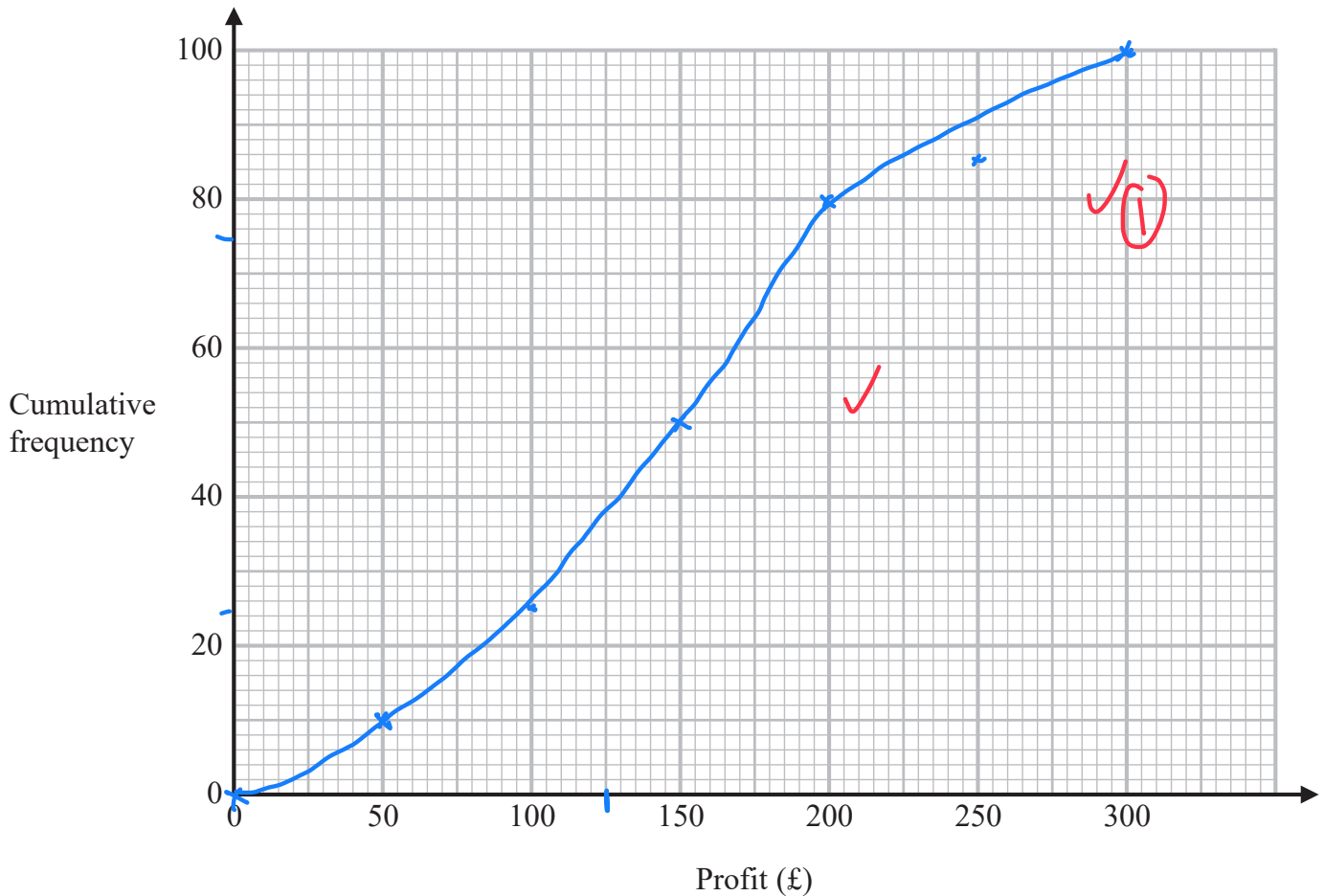
- (a) Complete the cumulative frequency table.

Profit (£ $x$ )	Cumulative frequency
$0 \leq x < 50$	10
$0 \leq x < 100$	25
$0 \leq x < 150$	50
$0 \leq x < 200$	80
$0 \leq x < 250$	85
$0 \leq x < 300$	100

✓ (1)

(1)

(b) On the grid, draw a cumulative frequency graph for this information.



(2)

(c) Use your graph to find an estimate for the number of days on which the profit was less than £125

at £125, days are 36 ✓ (1) 36 ..... days  
(1)

(d) Use your graph to find an estimate for the interquartile range.

day 25 to 75  
 £100      191 ✓ (1)  
 191 - 100 = 91 ✓ (1)      £ 91  
 (2)

(Total for Question 2 is 6 marks)