

Name: _____

Show work needed to justify your answer.

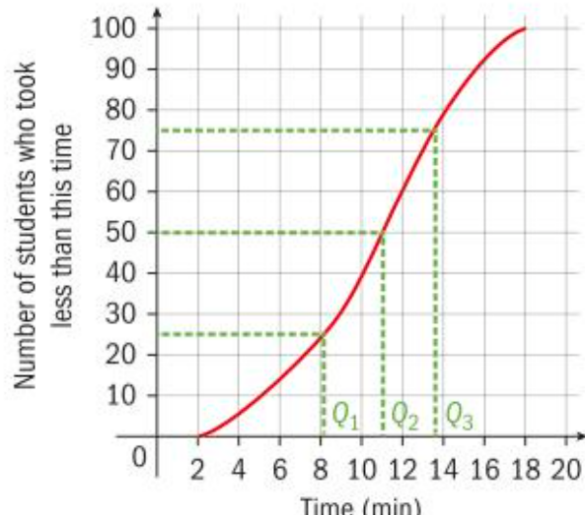
Date: _____

HW: # 26a: Math IBSL - Standard 25 - Measures of Dispersion (day 2)

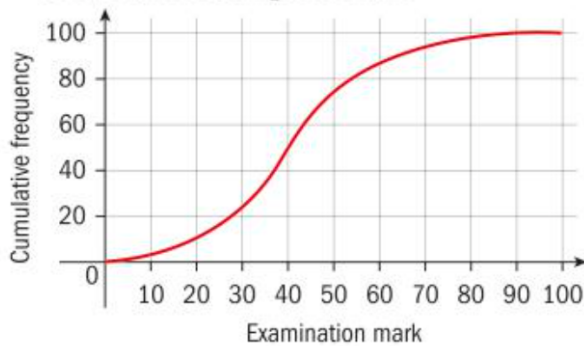
5 points

- 1 The time, in minutes, taken by 100 students to reply to their friends on social media is shown as a cumulative frequency curve.
- a Find the longest time taken to reply.
 - b Estimate the median time.

- c Estimate the interquartile range in time taken to reply.
- d 90% of the students replied in k minutes or less. Find k .



- 2 The marks obtained by 100 students are shown on this cumulative frequency curve. Estimate:
- a the median
 - b the interquartile range
 - c the lowest mark needed to be in or above the 80th percentile



Name: _____

Show work needed to justify your answer.

Date: _____

HW: # 26a: Math IBSL - Standard 25 - Measures of Dispersion (day 2)

5 points

- 3 A taxi company recorded the distance (km) travelled by each of its drivers one Saturday evening.

Distance (d , km)	f
$0 < d \leq 25$	0
$25 < d \leq 50$	32
$50 < d \leq 75$	102
$75 < d \leq 100$	86
$100 < d \leq 125$	16
$125 < d \leq 150$	4

- Construct a cumulative frequency table for this information.
- Draw a cumulative frequency diagram.
- Estimate the median distance travelled by the taxi drivers.
- Estimate the interquartile range in the distance travelled by the taxi drivers.
- Estimate the number of cars that travelled more than 130 km.