



Timester Challenge

Cumulative Frequency - Drawing

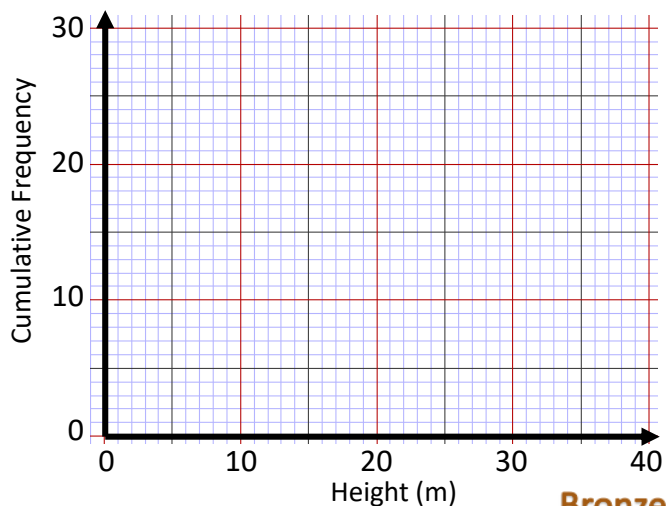


The table shows the height of 30 trees.

a) Construct a cumulative frequency table

Height (m)	Frequency	Height (cm)	CF
$0 < h \leq 5$	3	$0 < h \leq 5$	3
$5 < h \leq 10$	6	$0 < h \leq 10$	
$10 < h \leq 15$	12	$0 < h \leq 15$	
$15 < h \leq 20$	7	$0 < h \leq 20$	
$20 < h \leq 25$	2	$0 < h \leq 25$	

b) Draw the cumulative frequency graph on the grid below.



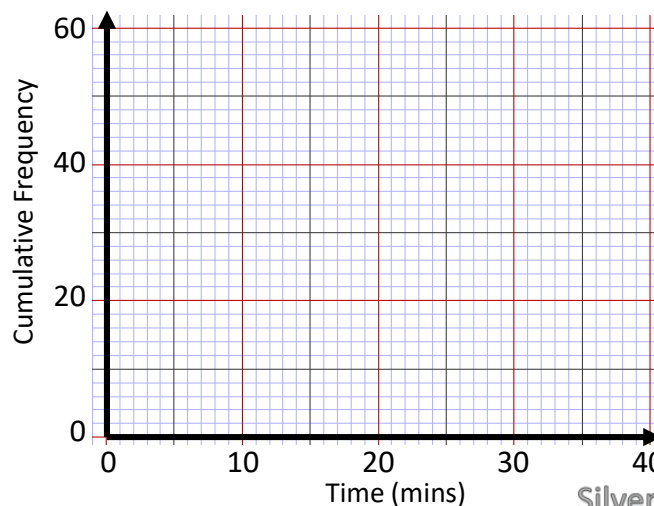
Bronze ★

The table shows 50 peoples times in a fun run..

a) Construct a cumulative frequency table

Time (mins)	Frequency		
$10 < t \leq 15$	2		
$15 < t \leq 20$	6		
$20 < t \leq 25$	14		
$25 < t \leq 35$	18		
$35 < t \leq 40$	10		

b) Draw the cumulative frequency graph on the grid below.

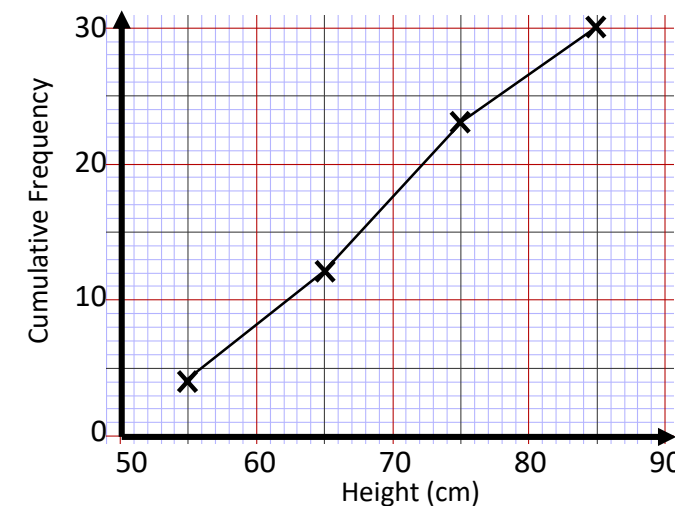


Silver ★

The table show the height of 30 primary students.

Height (cm)	Frequency
$50 < h \leq 60$	4
$60 < h \leq 70$	8
$70 < h \leq 80$	12
$80 < h \leq 90$	6

Ryan drew this cumulative frequency graph to represent the information.



Make **two** criticisms of Ryan's Graph.

Gold ★



Answers

Timester Challenge

Cumulative Frequency - Drawing

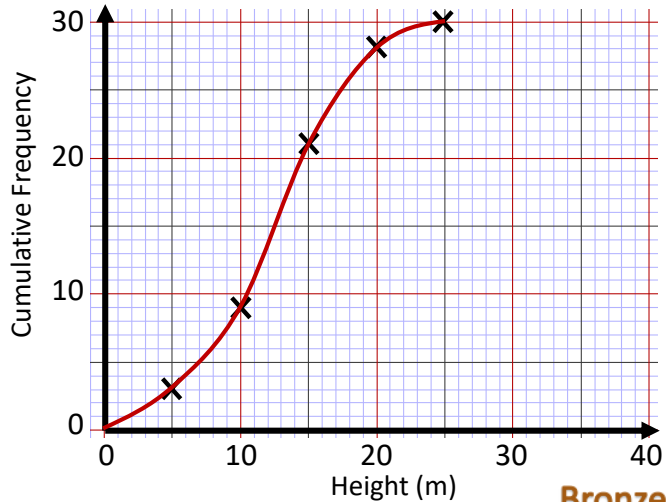


The table shows the height of 30 trees.

a) Construct a cumulative frequency table

Height (m)	Frequency	Height (cm)	CF
$0 < h \leq 5$	3	$0 < h \leq 5$	3
$5 < h \leq 10$	6	$0 < h \leq 10$	9
$10 < h \leq 15$	12	$0 < h \leq 15$	21
$15 < h \leq 20$	7	$0 < h \leq 20$	28
$20 < h \leq 25$	2	$0 < h \leq 25$	30

b) Draw the cumulative frequency graph on the grid below.



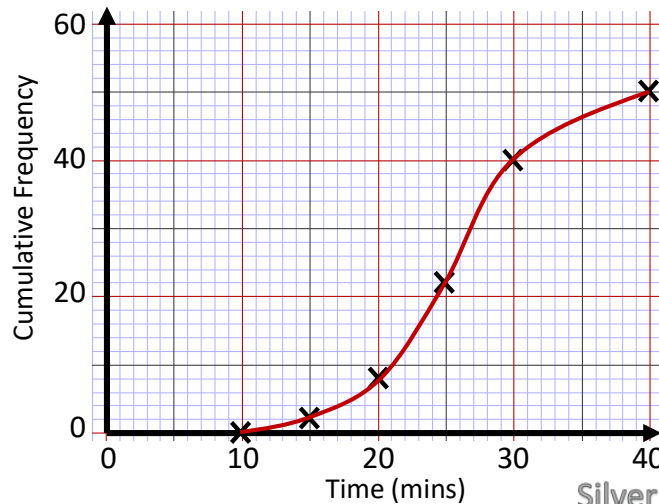
Bronze ★

The table shows 50 peoples times in a fun run..

a) Construct a cumulative frequency table

Time (mins)	Frequency	Time (mins)	CF
$10 < t \leq 15$	2	$10 < t \leq 15$	2
$15 < t \leq 20$	6	$10 < t \leq 20$	8
$20 < t \leq 25$	14	$10 < t \leq 25$	22
$25 < t \leq 35$	18	$10 < t \leq 35$	40
$35 < t \leq 40$	10	$10 < t \leq 40$	50

b) Draw the cumulative frequency graph on the grid below.

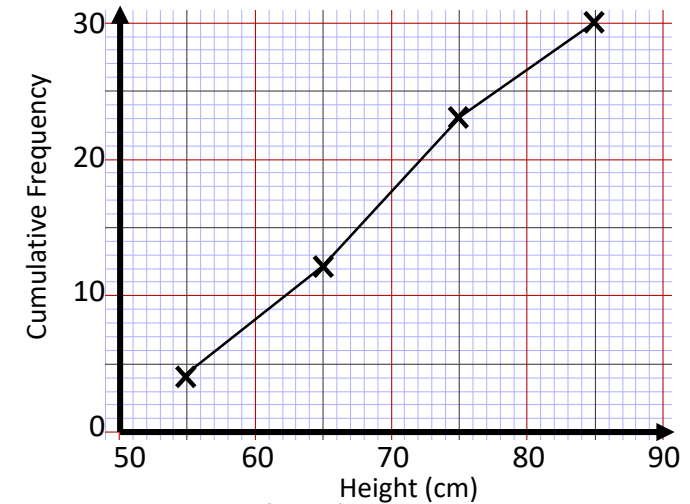


Silver ★

The table show the height of 30 primary students.

Height (cm)	Frequency
$50 < h \leq 60$	4
$60 < h \leq 70$	8
$70 < h \leq 80$	12
$80 < h \leq 90$	6

Ryan drew this cumulative frequency graph to represent the information.



Make **two** criticisms of Ryan's Graph.

He used straight lines instead of a smooth curve.
He has plotted the points at the mid point.

Gold ★