Info. & Prob. – data <u>cumulative frequency</u> question sheet IP-CUF-01

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www.gcsemathstutor.com

info@gcsemathstutor.com

1. The table represents the height and numbers of saplings in a strip of farm land.

	height(cm)	numbers(frequency)	cumulative frequency	o no a th
om	$50 < h \le 60$	ths ₂ utor	www.gcs	semaun
	$60 < h \le 70$	9		
	$70 < h \le 80$	15		
	$80 < h \le 90$	12	Taskana	
STU'	$90 < h \le 100$		s iutor~ w	ww.gc

- (a) copy and complete the table
- (b) plot points and sketch a graph of cumulative frequency against height
- (c) use the graph to find the median height of saplings
- (d) what is the lower quartile value?
- (e) what is the higher quartile value?
- S (f) what is the interquartile range?
 - (g) how many saplings had a height more than 75 cm?
 - (h) what height did more than 85% of the saplings attain?

(all answers to nearest whole number)

2. The table represents the value of shoes in a shop and how many were sold in a month.

cost of a pair of shoes(£)	pairs sold(frequency)	cumulative frequency
$5 < \cos t \le 10$	7	
$10 < \cos t \le 15$	21	
$15 < \cos t \le 20$	39	GCSE Maths
$20 < \cos t \le 25$	24	
$25 < \cos t \le 30$	15	

(a) copy and complete the table

- (b) plot points and sketch a graph of cumulative frequency against shoe cost
- (c) use the graph to find the median cost of shoes
- (d) what is the lower quartile value?
- (e) what is the higher quartile value?
- (f) what is the interquartile range?
- (g) how many shoes cost more than $\pounds 27?$
- (h) what was the highest price for 90% of the shoes?

(all answers to nearest whole number)

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Info. & Prob. – data <u>cumulative frequency</u> answer sheet IP-CUF-01

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	height(cm)	numbers(frequency)	cumulative frequency	
	$50 < h \le 60$	2	2	one of h
or.com	$60 < h \le 70$			semath
	$70 < h \le 80$	15	26	
	$80 < h \le 90$	12	38	
and the last section of the	$90 < h \le 100$	COL Math	45	
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- (c) 78 cm
- (d) 72 cm
- (e) 85 cm hs Tutor~ www.gcsemathstutor.con (f) 13 cm
 - (g) 29
 - (h) 90 cm

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2.

	cost of a pair of shoes(£)	pairs sold(frequency)	cumulative frequency	
	$5 < \cos t \le 10$	SF Maths	Tutor~ ww	w.a
	$10 < \cos t \le 15$	21	28	
	$15 < \cos t \le 20$	39	67	
	$20 < \cos t \le 25$	24	91	
g	$25 < \cos t \le 30$	Itor.q50m~	-106 CUIN	5 I U

(c) £18

(d) £15

v.gc(e) £23 mathstutor.com~GCSE Maths Tutor~ V

- (f) £8
- (g) 8
- (h) £26

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