

Name:

Class/Set:

DEMO Data Handling Questions

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Please write your answers on this sheet.

1: Complete the cumulative frequency table:

a)

area (cm ²)	Frequency	area (cm ²)	Cum Freq
$20 < A \leq 30$	0	$A \leq 30$	
$30 < A \leq 40$	3	$A \leq 40$	
$40 < A \leq 50$	16	$A \leq 50$	
$50 < A \leq 60$	37	$A \leq 60$	
$60 < A \leq 70$	28	$A \leq 70$	

b)

height (m)	Frequency	height (m)	Cum Freq
$10 < h \leq 20$	23	$h \leq 20$	
$20 < h \leq 30$	37	$h \leq 30$	
$30 < h \leq 40$	21	$h \leq 40$	
$40 < h \leq 50$	6	$h \leq 50$	
$50 < h \leq 60$	1	$h \leq 60$	

c)

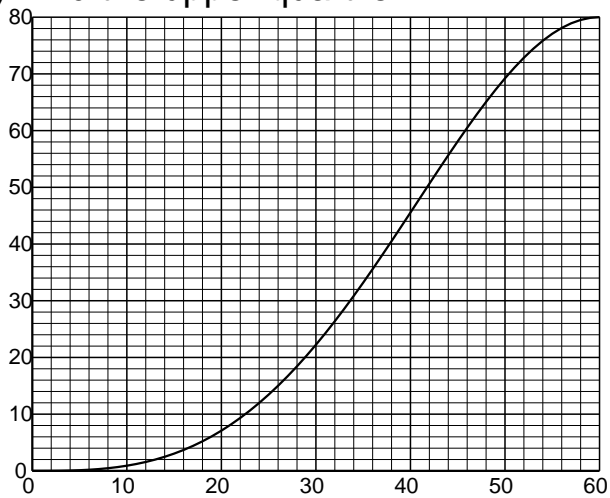
length (cm)	Frequency	length (cm)	Cum Freq
$0 < l \leq 10$	25	$l \leq 10$	
$10 < l \leq 20$	35	$l \leq 20$	
$20 < l \leq 30$	16	$l \leq 30$	
$30 < l \leq 40$	4	$l \leq 40$	
$40 < l \leq 50$	0	$l \leq 50$	

d)

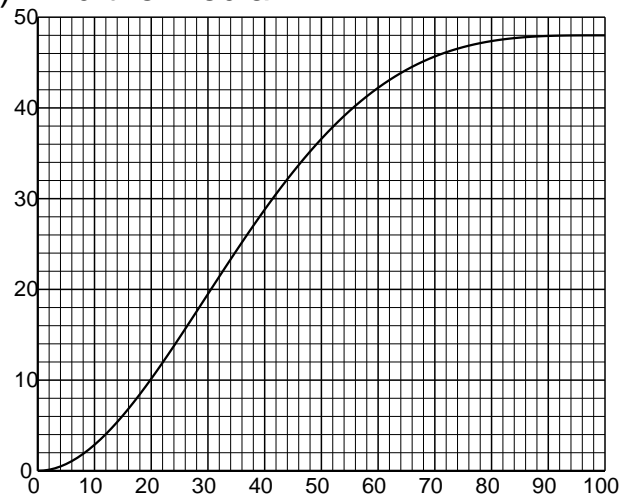
diameter (cm)	Frequency	diameter (cm)	Cum Freq
$50 < d \leq 60$	0	$d \leq 60$	
$60 < d \leq 70$	6	$d \leq 70$	
$70 < d \leq 80$	20	$d \leq 80$	
$80 < d \leq 90$	40	$d \leq 90$	
$90 < d \leq 100$	26	$d \leq 100$	

2: Read the following off the cumulative frequency graph:

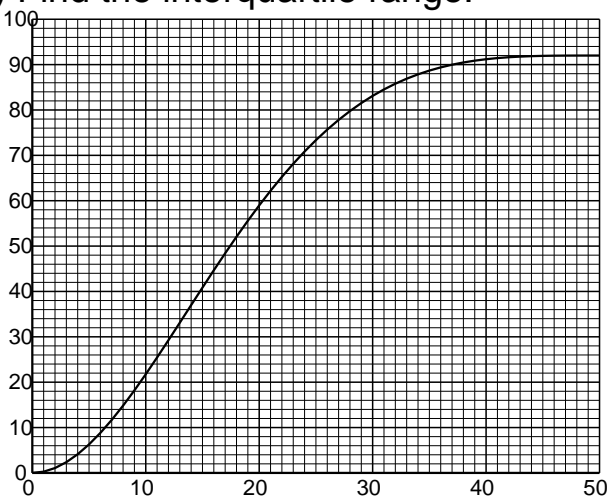
a) Find the upper quartile:



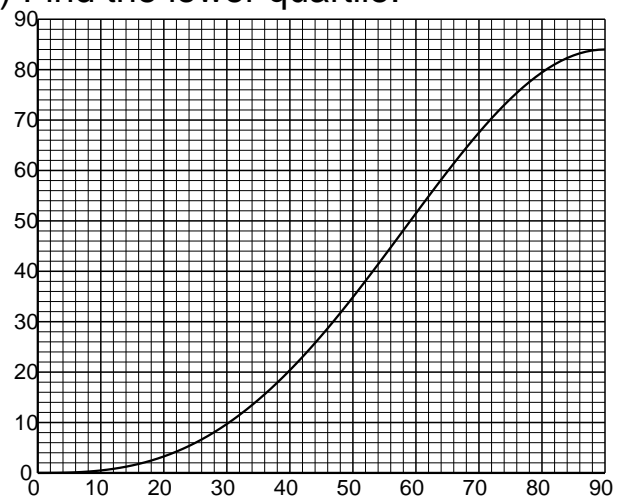
b) Find the median:



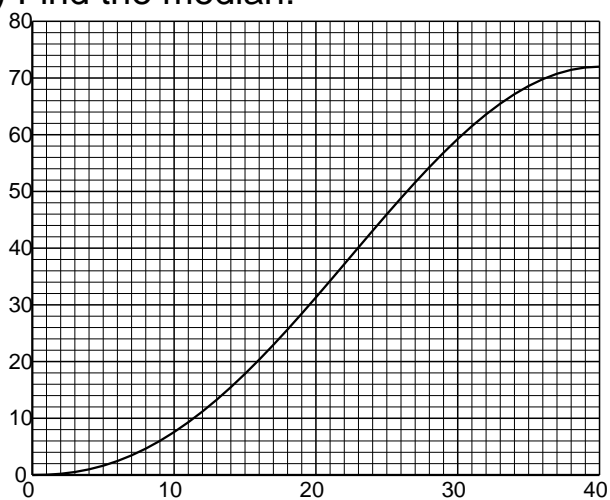
c) Find the interquartile range:



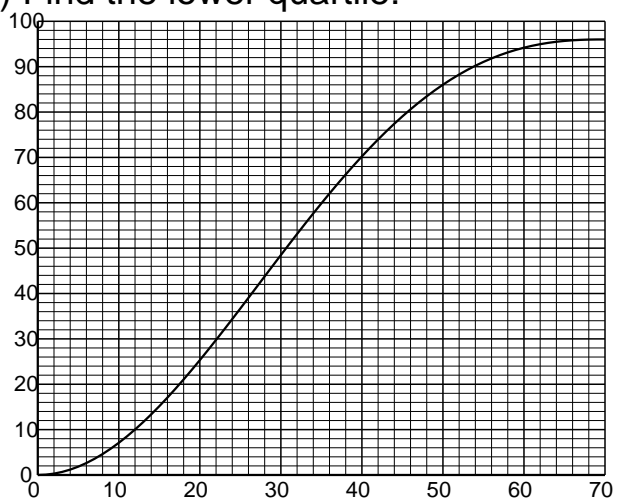
d) Find the lower quartile:



e) Find the median:



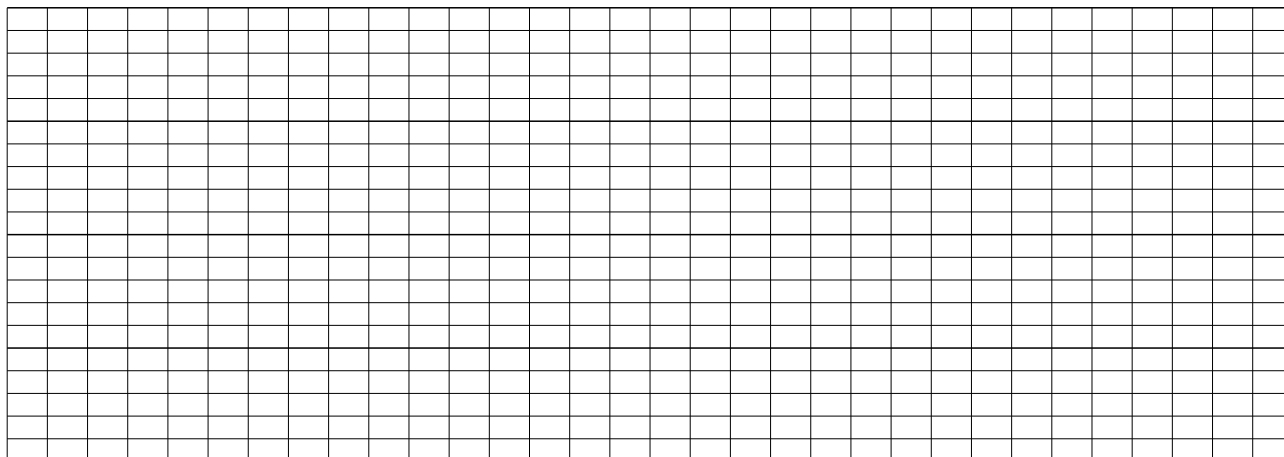
f) Find the lower quartile:



3: Plot the following histogram:

a)

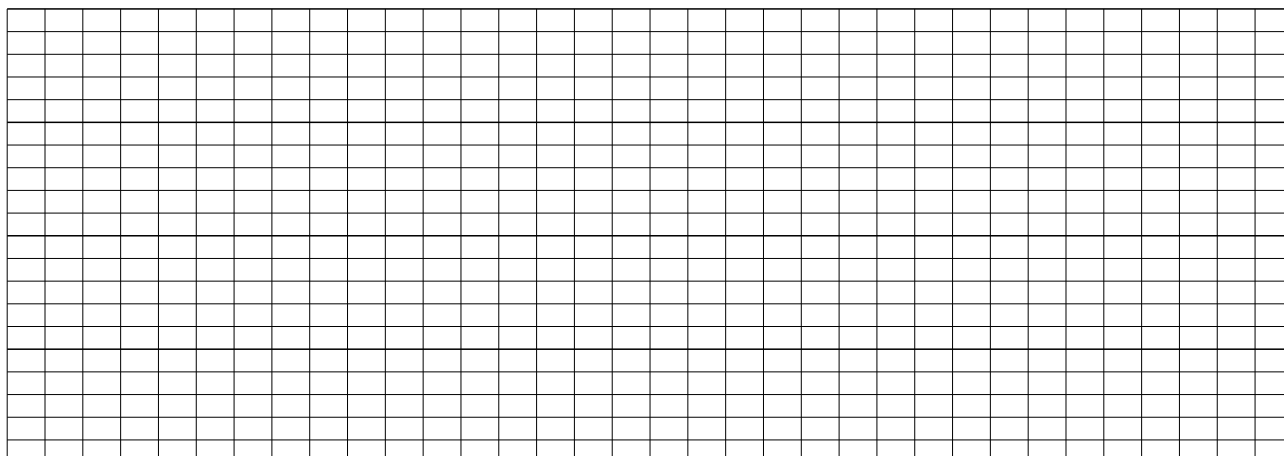
volume (m ³)	200 – 250	250 – 450	450 – 600	600 – 800	800 – 1000
frequency	12000	4000	55500	22000	32000



200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000

b)

width (mm)	150 – 350	350 – 550	550 – 700	700 – 900	900 – 1000
frequency	60	80	600	340	320

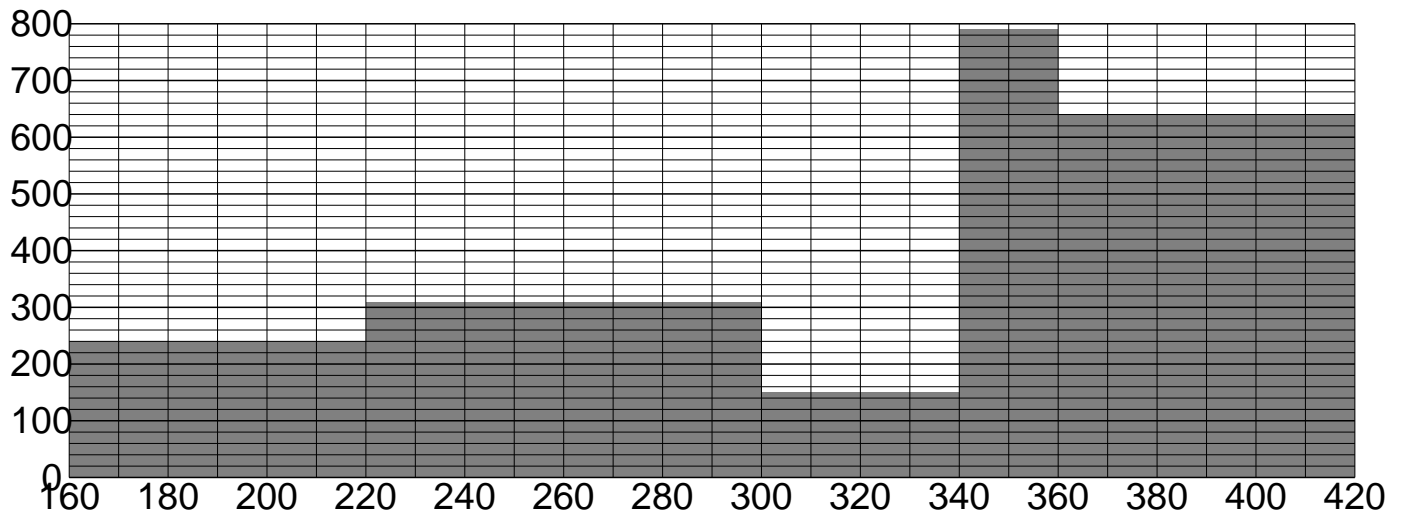


150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000

4: Complete the table from the histogram:

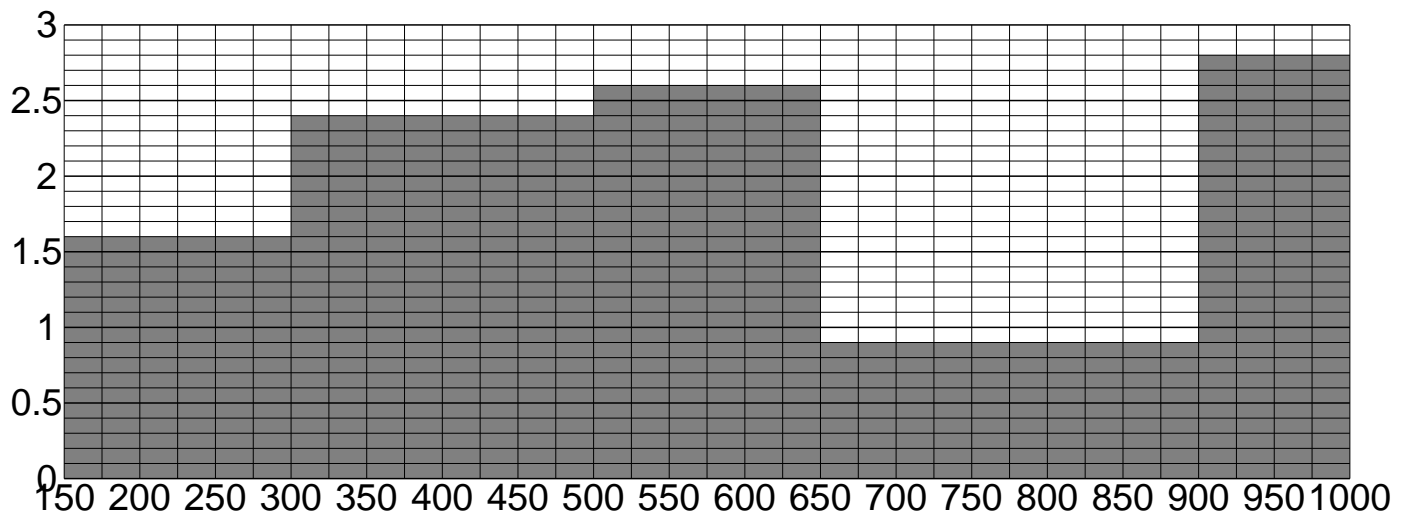
a)

mass (g)	160 – 220	220 – 300	300 – 340	340 – 360	360 – 420
frequency					



b)

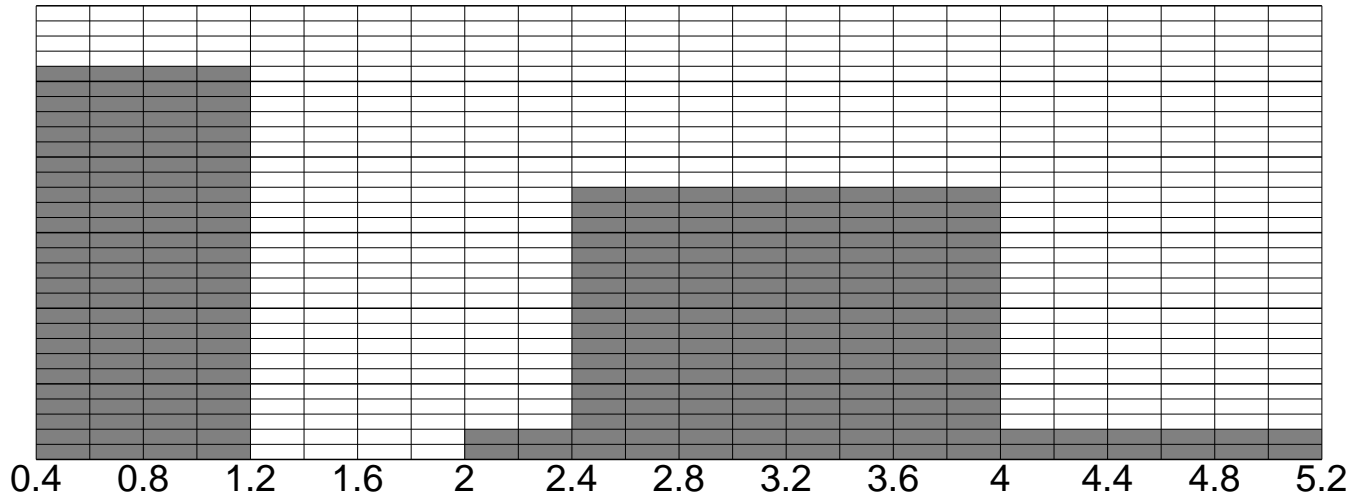
time (min)	150 – 300	300 – 500	500 – 650	650 – 900	900 – 1000
frequency					



5: Complete the table and the histogram:

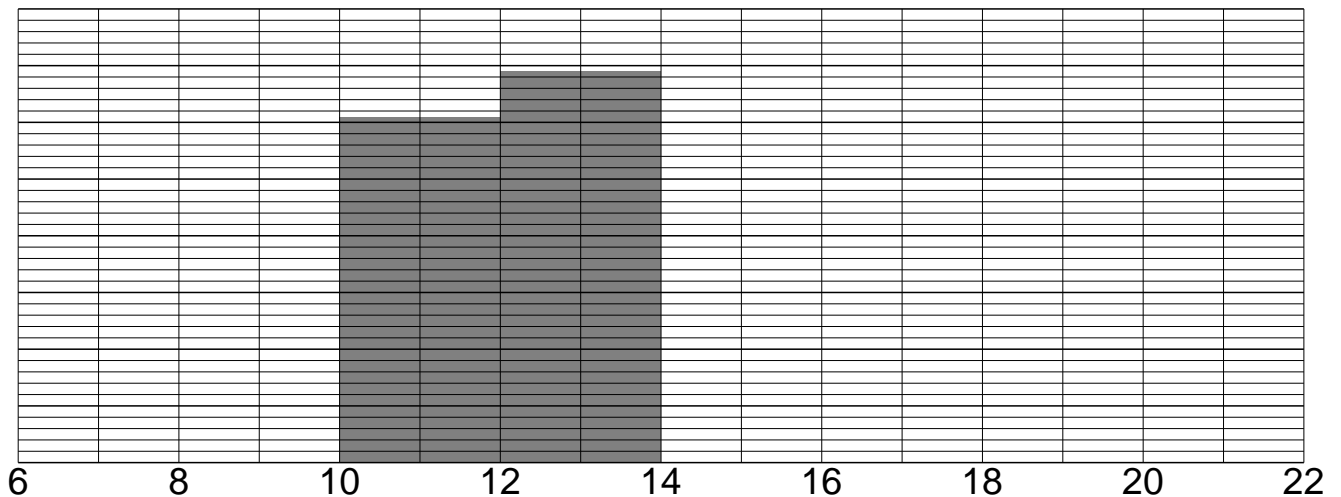
a)

age (years)	0.4 – 1.2	1.2 – 2.0	2.0 – 2.4	2.4 – 4.0	4.0 – 5.2
frequency		11.2	0.4		



b)

area (m ²)	6 – 10	10 – 12	12 – 14	14 – 18	18 – 22
frequency	2680	1220		2840	2800



Answers: DEMO Data Handling Questions

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1: a)

area (cm ²)	Cum Freq
$A \leq 30$	0
$A \leq 40$	3
$A \leq 50$	19
$A \leq 60$	56
$A \leq 70$	84

b)

height (m)	Cum Freq
$h \leq 20$	23
$h \leq 30$	60
$h \leq 40$	81
$h \leq 50$	87
$h \leq 60$	88

c)

length (cm)	Cum Freq
$l \leq 10$	25
$l \leq 20$	60
$l \leq 30$	76
$l \leq 40$	80
$l \leq 50$	80

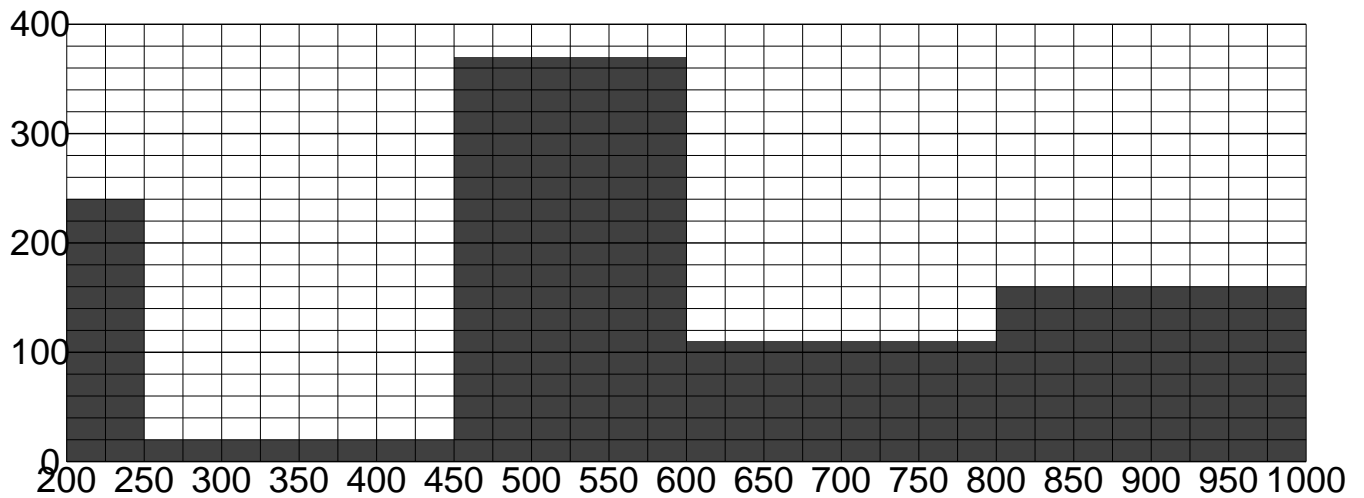
d)

diameter (cm)	Cum Freq
$d \leq 60$	0
$d \leq 70$	6
$d \leq 80$	26
$d \leq 90$	66
$d \leq 100$	92

2: a) 45 – 46 b) 34 – 35 c) 12 – 14 d) 40 – 41 e) 21 – 22 f) 19 – 20

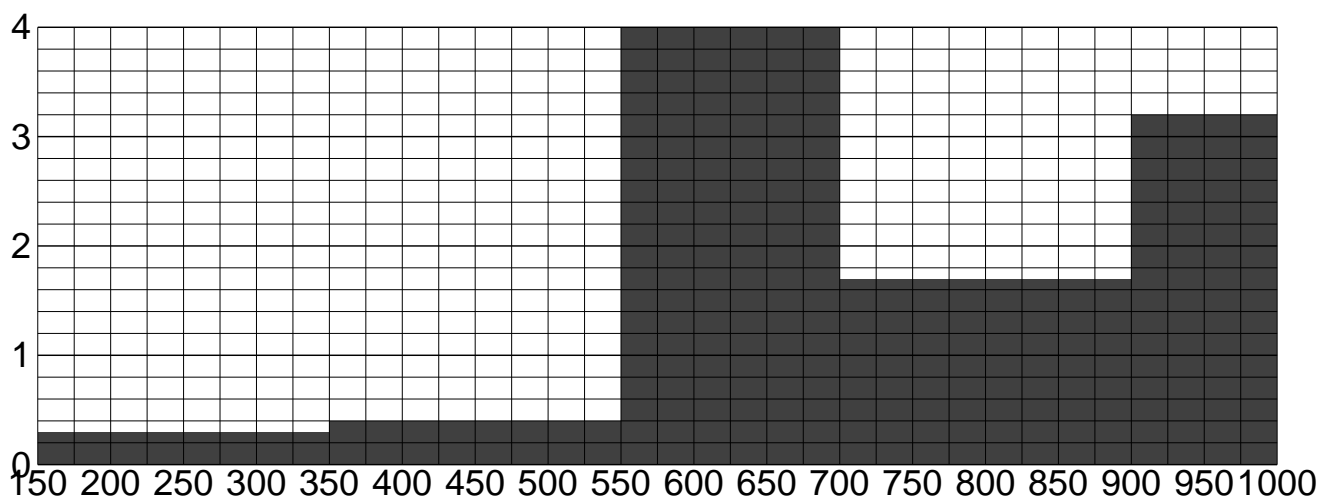
3: a)

volume (m ³)	200 – 250	250 – 450	450 – 600	600 – 800	800 – 1000
frequency	12000	4000	55500	22000	32000
freq. density	240	20	370	110	160



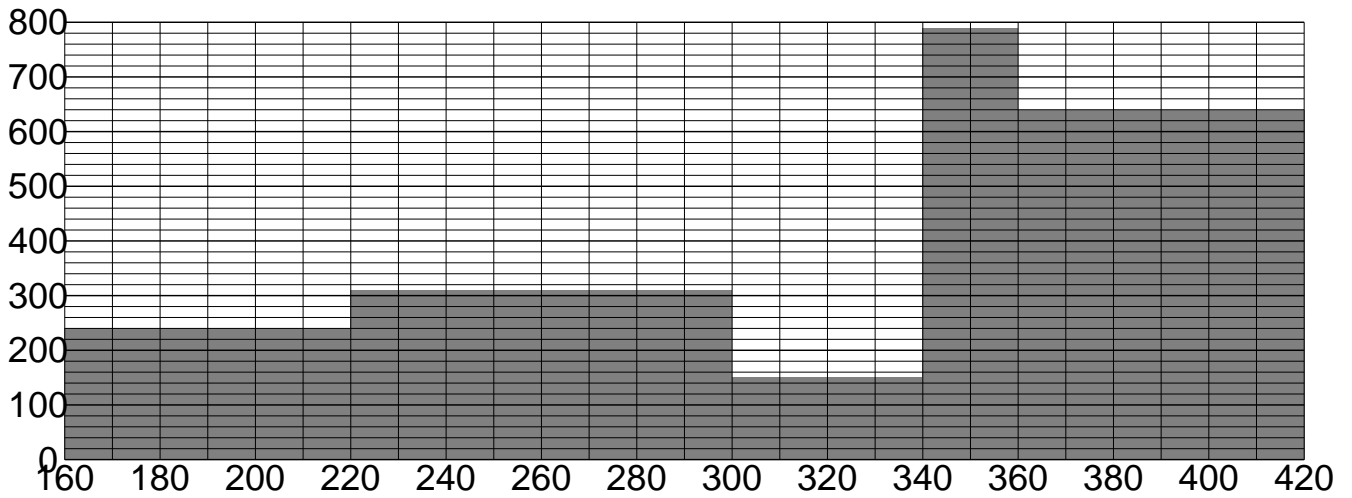
b)

width (mm)	150 – 350	350 – 550	550 – 700	700 – 900	900 – 1000
frequency	60	80	600	340	320
freq. density	0.3	0.4	4.0	1.7	3.2



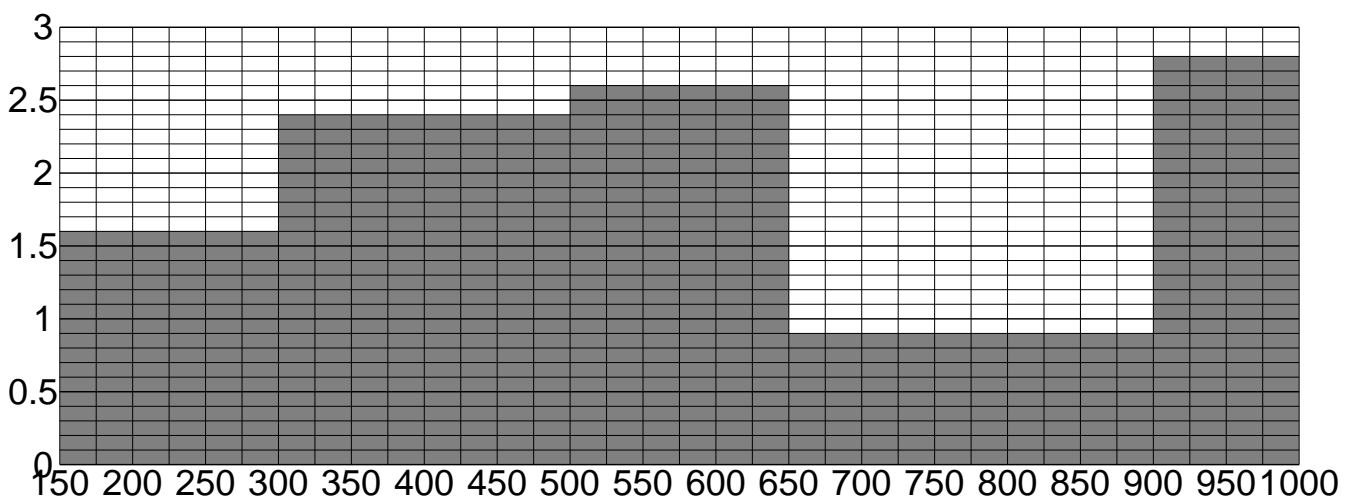
4: a)

mass (g)	160 – 220	220 – 300	300 – 340	340 – 360	360 – 420
frequency	14400	24800	6000	15800	38400
freq. density	240	310	150	790	640



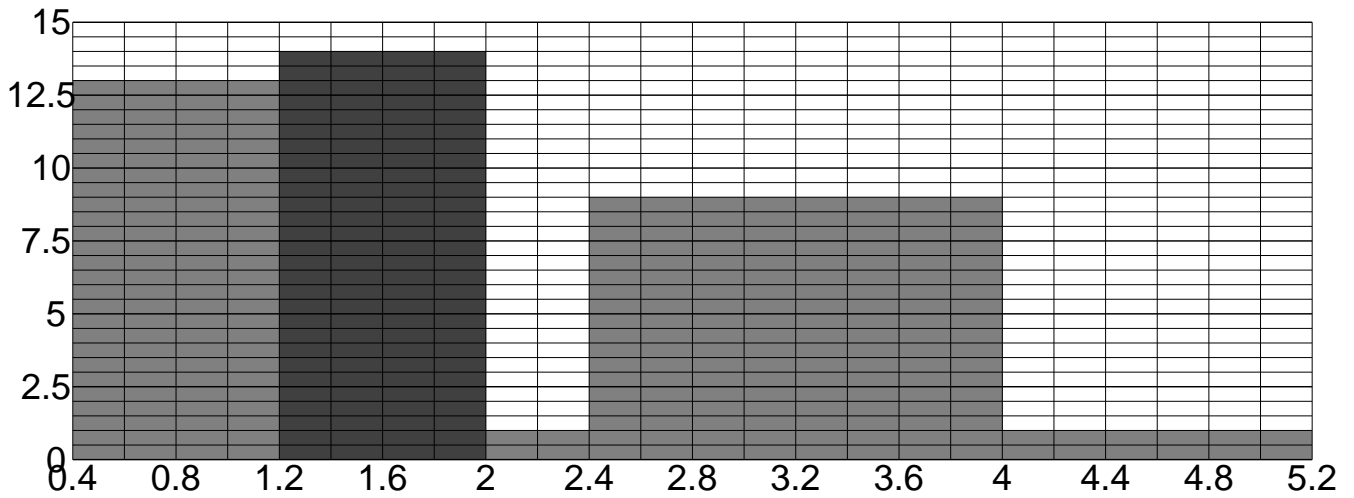
b)

time (min)	150 – 300	300 – 500	500 – 650	650 – 900	900 – 1000
frequency	240	480	390	225	280
freq. density	1.6	2.4	2.6	0.9	2.8



5: a)

age (years)	0.4 – 1.2	1.2 – 2.0	2.0 – 2.4	2.4 – 4.0	4.0 – 5.2
frequency	10.4	11.2	0.4	14.4	1.2
freq. density	13	14	1	9	1



b)

area (m ²)	6 – 10	10 – 12	12 – 14	14 – 18	18 – 22
frequency	2680	1220	1380	2840	2800
freq. density	670	610	690	710	700

