

Name: _____

Frequency Distribution of Grouped Data

Exercise 1: The following frequency distribution shows the distance to a campus (in kilometers) traveled by 30 students:

Distance (in miles)	Frequency
35-40	8
40-45	13
45-50	6
50-55	3

For the class 40-45, find the following:

- 1) Lower class limit
- 2) Upper class limit
- 3) Class width
- 4) Cumulative frequency (increasing and decreasing)
- 5) Relative frequency
- 6) Cumulative relative frequency

Exercise 2: The following data shows the diameters of 25 ball-bearings in cms.

0.386	0.377	0.382	0.400	0.380
0.397	0.404	0.390	0.379	0.384
0.387	0.396	0.388	0.384	0.376
0.391	0.390	0.380	0.381	0.399
0.401	0.404	0.393	0.383	0.390

Construct a grouped frequency distribution table with class intervals 0.375 – 0.380, 0.380 – 0.385 etc.

Exercise 3: Given below the number of tools produced by workers in a factory.

13	22	15	30	28	34	21	35	40	17
44	36	40	42	32	23	23	40	28	28
29	25	24	32	27	36	24	16	28	33
35	34	32	30	31	32	23	32	36	42
36	38	17	31	25	21	41	33	23	16
46	29	41	26	39	27	37	40	41	29
37	26	37	45	41	31	34	33	35	32
45	14	42	35	37	27	22	33	29	42

- a) Construct frequency distribution with inclusive type of class interval.
- b) How many workers produced more than 38 tools?
- c) How many workers produced less than 23 tool?