

GRADES-1 ANSWERS

For each of the following sets of grades, do the following:

- a. Construct a frequency distribution beginning with a lower class limit of 50 and using classes of width 10.
- b. Convert your frequency distribution to a cumulative frequency distribution.
- c. Convert your frequency distribution to a relative frequency distribution, and round to the nearest percent.
- d. Convert your relative frequency distribution to a cumulative relative frequency distribution.
- e. List the lower class limits.
- f. List the upper class limits.
- g. List the class boundaries.
- h. List the class midpoints.

1. 55, 62, 63, 66, 67, 69, 71, 71, 73, 74, 75, 78, 79, 85, 87, 88, 89, 92, 92, 99

a.

CLASS	FREQUENCY
50-59	1
60-69	5
70-79	7
80-89	4
90-99	3

b.

CLASS	CUMULATIVE FREQUENCY
less than 60	1
less than 70	6
less than 80	13
less than 90	17
less than 100	20

c.

CLASS	RELATIVE FREQUENCY
50-59	5%
60-69	25%
70-79	35%
80-89	20%
90-99	15%

d.

CLASS	CUMULATIVE RELATIVE FREQUENCY
less than 60	5%
less than 70	30%
less than 80	65%
less than 90	85%
less than 100	100%

e. 50,60,70,80,90

- f. 59,69,79,89,99
- g. 49.5,59.5,69.5,79.5,89.5,99.5
- h. 54.5,64.5,74.5,84.5,94.5

2. 54, 56, 63, 72, 73, 75, 76, 77, 78, 81, 81, 89, 91, 92, 95, 95, 95, 96, 97, 98

a.

CLASS	FREQUENCY
50-59	2
60-69	1
70-79	6
80-89	3
90-99	8

b.

CLASS	CUMULATIVE FREQUENCY
less than 60	2
less than 70	3
less than 80	9
less than 90	12
less than 100	20

c.

CLASS	RELATIVE FREQUENCY
50-59	10%
60-69	5%
70-79	30%
80-89	15%
90-99	40%

d.

CLASS	CUMULATIVE RELATIVE FREQUENCY
less than 60	10%
less than 70	15%
less than 80	45%
less than 90	60%
less than 100	100%

- e. 50,60,70,80,90
- f. 59,69,79,89,99
- g. 49.5,59.5,69.5,79.5,89.5,99.5
- h. 54.5,64.5,74.5,84.5,94.5