

Math 153 - Quiz 3

September 11, 2018

Name key

Score _____

Show all work to receive full credit. Supply explanations when necessary. This quiz is worth 5 points. YOU MUST WORK INDIVIDUALLY.

1. (2 points) The following table summarizes the ages of the winners of the Best Actress Oscar.

CLASS WIDTH
IS 10.

Age of Best Actress (yr)	Frequency
20-29	29
30-39	34
40-49	14
50-59	3
60-69	5
70-79	1
80-89	1

- (a) Compute the class midpoints.

$$\frac{20+29}{2} = 24.5, 34.5, 44.5, \dots, 84.5$$

- (b) Compute the class boundaries.

$$19.5, 29.5, 39.5, \dots, 89.5$$

2. (3 points) Listed below are sorted duration times (seconds) of eruptions of the Old Faithful geyser in Yellowstone National Park. Construct a frequency distribution with lowest class limit 125 seconds and class width 25 seconds.

~~125, 203, 205, 221, 225, 229, 233, 233, 235, 236, 236, 237, 238, 238, 239, 240, 240~~
~~240, 240, 241, 241, 242, 242, 242, 243, 243, 244, 245, 245, 245, 245, 246, 246, 248~~
~~248, 248, 249, 249, 250, 251, 252, 253, 253, 255, 255, 256, 257, 258, 262, 264~~

Eruption Duration (sec)	Frequency
125-149	1
150-174	0
175-199	0
200-224	3
225-249	34
250-274	12