

I. Find the measures of central tendency of each set of data to the nearest tenth. Write NA (not applicable) where its appropriate.

Given Set of Data	Mean	Median	Mode
1.) {32, 41, 35, 35, 46, 42}	38.5	38	35
2.) {13, 62, 77, 24, 38, 19, 88}	45.9	38	NA
3.) {89, 99, 42, 16, 42, 71, 16}	53.6	42	16
4.) {450, 400, 625, 225, 300, 750, 650, 625, 300, 450}	477.5	450	625 300
5.) {17, 23, 65, 94, 33, 33, 33, 8, 57, 75, 44, 12, 11, 68, 39}	40.8	33	33
6.) {72, 31, 38, 9.5, 8.3, 8.4, 11.2, 7.2}	7.3	7.75	7.2
7.) {1.5, 2.5, 3.5, 4.5, 4.5, 5.5, 6.5, 7.5}	4.5	4.5	4.5
8.) {321, 322, 323, 324, 325, 326, 327, 328, 329, 330}	325.5	325.5	NA
9.) {43, 56, 78, 81, 47, 42, 34, 22, 78, 97, 38, 46, 54, 67}	55.9	50.5	78
10.) {5, 4, 5, 5, 5, 5, 6, 6, 6, 6, 7, 7, 7, 8, 9}	6.1	6	5
11.) {13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 67, 56, 34, 99}	30.9	19.5	NA
12.) {0.2, 0.01, 0.3, 1, 0.4, 0.005, 0.60, 0.07, .80, .09}	0.3	.08	NA
13.) {243, 345, 123, 368, 279, 876, 456, 235, 333, 444}	370.2	339	NA
14.) {4.3, 6.4, 2.9, 3.1, 8.7, 2.8, 3.6, 1.9, 7.2}	4.5	3.6	NA
15.) {48, 36, 40, 29, 45, 51, 38, 47, 39, 37}	41	39.5	NA

II. Use the data in the given table to complete each problem or answers each question.

- 16.) The table below shows the amount of money spent on education per student in 1998 in two regions of the United States.

Pacific States	Southwest Central States
Expenditures per Student (\$)	Expenditures per Student (\$)
Alaska	Texas
California	Arkansas
Washington	Louisiana
Oregon	Oklahoma
10,650	6291
5345	5222
6488	5194
6719	4634

a.) Find the mean of each region:

i.) Pacific region mean = 7300.5ii.) Southwest Central region mean = 5335.3

- b.) For which region is the mean more representative of the data. Explain.

- 17.) The table below shows the number of rebounds for the players on a professional women's basketball team.

306	179	205	194	105	55	122	32	23	16	23
-----	-----	-----	-----	-----	----	-----	----	----	----	----

a.) Find the measures of central tendency:

mean = 114.54 median = 105 mode = 23

b.) Which measure of central tendency best represents the data? Explain.

- 18.) The table below shows the profit (in billions of dollars) reported by the U.S. manufacturers for the first quarter of the years from 1997 to 2001.

Year	1997	1998	1999	2000	2001
Profit (in billions)	\$61.4	\$75.6	\$60.9	\$78.5	\$45.3

a.) What are the values of the mean and median for this set of data to the nearest tenth?

mean = 63.34 billion median = 61.4 billion

b.) Which measure of central tendency best represents this set of data? Explain.

- 19.) Use the stem-leaf plot to find the measures of central tendency:
- income or expenses

Stem Leaf

5	7 7 7 8 9
6	3 4 5 5 6 7
7	2 3 4 5 6

mean = 65.5 median = 65 mode = 57

income or expenses could be outliers. which could make mean misleading.

$$\frac{1048}{16} = 65.5$$