

Name: _____
 Date: _____
 Class: _____

Algebra
 Unit 12
 HW 12-1

1) The following grades are Jim's test grades in English for each semester. Create a stem and leaf plot for each semester.

Semester 1: 78, 91, 88, 83, 94

Semester 2: 91, 96, 80, 77, 88, 85, 92

Test Grades Semester 1

stem	leaf
7	8
8	3 8
9	1 4

Key 7|8 = 78

Test Grades Semester 2

stem	leaf
7	7
8	0 5 8
9	1 2 6

Key 7|7 = 77

2) Find the mean, median, and mode for the following data

Score	Number of Students
72	4
74	1
76	3
81	5
88	4
91	1
97	3
99	2

$$\frac{\text{Cumulative Freq Total}}{N} = \frac{174}{23} = 82.6$$

$$13^{\text{th}} \text{ median } \frac{23+1}{2} = 12^{\text{th}} \text{ median is } (81)$$

Mode \rightarrow (81)

3) The following are Mary's homework grades in Spanish. Create a stem and leaf that will display this data:

52, 60, 66, 66, 68, 72, 72, 73, 74, 75, 80, 82, 84, 91, 92, 98

Mary's Hw Grades

stem	Leaf
5	2
6	0 6 6 8
7	2 2 3 4 5
8	0 2 4
9	1 2 8

Key $\frac{5}{2} = 52$

4) Find the mean, median, and mode for the following data, which is the amount of snowfall per day for the winter season:

Inches of Snow	Number of Days
0	12
0.5	4
0.75	6
1.0	3
1.5	6
1.75	8
2.5	1
3.25	3
4.5	1

44 days

12 Mode $\rightarrow 0$

16
22
25* Median $\rightarrow \frac{44}{2} = 22.5^{th}$ st

1.0 \rightarrow median

Mean $\rightarrow \frac{\text{Total}}{44} \rightarrow 1.012$

5) Tim has the following homework averages for the 1st quarter in Science:

Score	# of Occurrences
100	10
90	5
80	x
70	3
60	2
0	3

23+x assignments

$$\frac{1700 + 80x}{23+x} = 78$$

$$1700 + 80x = 1794 + 78x$$

$$\frac{2x}{2} = \frac{14}{2} \quad \boxed{x=7}$$

If his homework average for the quarter is 78, how many times did he score an 80 on a homework assignment.

7 80s

6) Listed below are the amounts of rainfall to the nearest tenth that have occurred at a student's home. Create a stem and leaf for this data:

1.1, 0.5, 0, 1, 0, 0.2, 0.1, 0, 0.5, 0.8, 1.2, 2.4, 3.1, 0.1, 0, 0, 0, 0.2, 0.8, 1.1, 4.1, 0, 0, 0

Amounts of rainfall

Stem	Leaf
0	0 0 0 0 0 0 0 0 1 1 2 2 5 5 8 8
1	0 1 1 2
2	4
3	1
4	1

Key 0|0 = 0.0