

The Set of Integers

Answer each of the following, involving basic integer concepts as well as those from previous Units in this course.

- [1] Order the set of integers {3, -6, 20, 0, -7, -8, -12, -4, 4} from least to greatest, and then find their median.
- [2] Order the set of integers {-12, -16, -20, 18, -2, 4, 442, 61} from least to greatest, and then find their median.
- [3] Create a **stem-and-leaf plot** for the data set at right, and use it to determine the median. You may not use any breaks.
- [4] The wreck of the R.M.S. Titanic is located about 14,500 feet below sea level. Write an integer to describe this depth.
- [5] The peak of Mt. Everest is about 27,800 feet above sea level. Write an integer to describe this altitude.
- [6] By how many feet do your answers for problems [4] and [5] differ? Draw a diagram to clearly demonstrate that your answer is correct, and explain how this diagram supports your answer.
- [7] Create a **line plot** for the data set at right, and use it to determine the median. You may not use any breaks.

32	6	-9	20
11	5	-18	-8
-6	-12	0	-12
-12	-2	-10	-13
-22	-2	16	53
8	-3	22	7

8	-3	-2	2
1	-5	-3	-1
-6	0	0	-1
-2	4	1	-1