

Section 16-2: Organizing Data

Constructing a Stem-and-Leaf Diagram

Grouped Data

1. 060401a, P.I. A.S.9

The test scores for 10 students in Ms. Sampson's homeroom were 61, 67, 81, 83, 87, 88, 89, 90, 98, and 100. Which frequency table is accurate for this set of data?

[A]

Interval	Frequency
61–70	2
71–80	2
81–90	8
91–100	10

[B]

Interval	Frequency
61–70	2
71–80	2
81–90	7
91–100	10

[C]

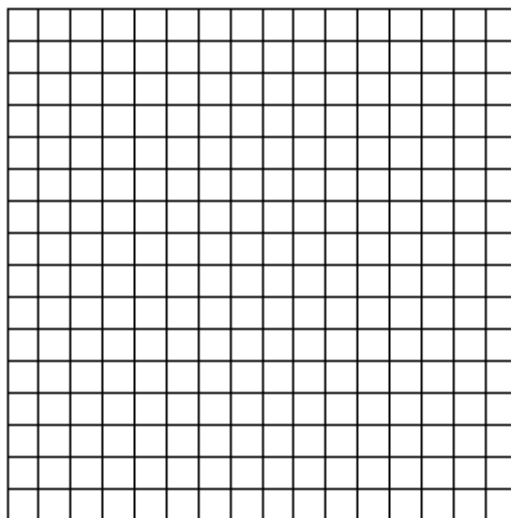
Interval	Frequency
61–70	2
71–80	0
81–90	8
91–100	10

[D]

Interval	Frequency
61–70	2
71–80	0
81–90	6
91–100	2

2. 010132a, P.I. A.S.5

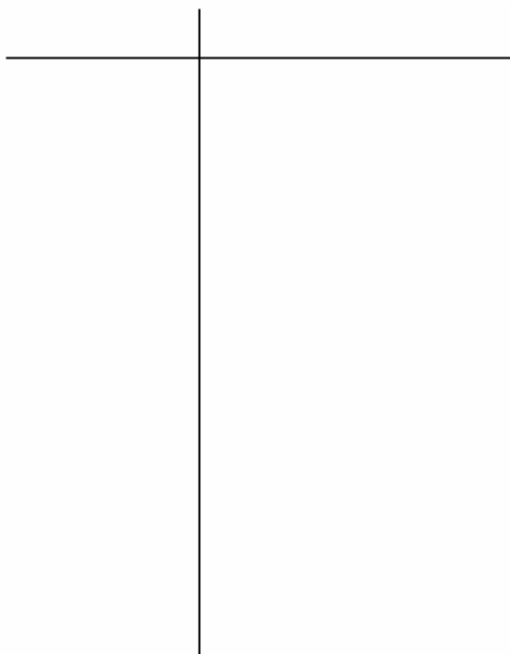
On a science quiz, 20 students received the following scores: 100, 95, 95, 90, 85, 85, 85, 80, 80, 80, 80, 75, 75, 75, 70, 70, 65, 65, 60, 55. Construct a statistical graph, such as a histogram or a stem-and-leaf plot, to display this data. *[Be sure to title the graph and label all axes or parts used.]*



3. 010535a

Construct a stem-and-leaf plot listing the scores below in order from lowest to highest.

15, 25, 28, 32, 39, 40, 43, 26, 50, 75, 65, 19,
55, 72, 50



[1] D

[4] The student draws a histogram, a stem-and-leaf plot, or any other acceptable statistical graph, with proper labels and a title.

[3] The student makes one or two minor errors, such as a lack of label, title, or connected dots.

[2] The student makes several minor errors or one major error, such as not accounting for all 20 scores.

[1] The student draws just the beginning of a graph.

[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously

[2] incorrect procedure.

[2] A correct stem-and-leaf plot is drawn, including a key.

[1] The data are arranged correctly, but incorrect labels are written on the stem-and-leaf columns. [Columns do not need to be labeled for a full-credit response, but full credit may not be awarded if the columns are labeled incorrectly.]

or [1] The data are listed in the stem-and-leaf plot, but not in ascending order.

or [1] One or two of the scores are left out of the stem-and-leaf plot.

or [1] Duplicate values are left out of the stem-and-leaf plot.

[0] Incorrect labels are written on the stem-and-leaf columns, and scores are left out of the plot.

or [0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an

[3] obviously incorrect procedure.