1. The principal asked each classroom to report the number of bags of newspapers collected for the recycling project.

| Bags of <br> Newspapers Collected |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |$|$| 3 | 7 | 7 | 9 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 3 | 3 | 7 | 8 | 8 |
| 3 | 3 | 6 | 7 |  |  |
| 4 | 2 | 4 | 9 |  |  |
| 5 | 1 | 2 |  |  |  |
| 6 | 1 | 3 |  |  |  |

How many classrooms collected 40 or more bags of newspapers?

A 7
B 6
C 5
D 3
2. Professor Smith is doing a study on the number of geese that come to Green Lake each day. Her data show that during the first week there were $27,34,22,49,38,30$, and 40 geese. Which stem-and-leaf plot shows her data?

A Number of Geese

| 1 | 0 |  |  |
| :--- | :--- | :--- | :--- |
| 2 | 2 | 7 |  |
| 3 | 0 | 4 | 8 |
| 4 | 9 |  |  |
| 5 | 0 |  |  |
|  |  |  |  |

B Number of Geese

| 1 |  |  |
| :--- | :--- | :--- |
| 2 | 2 | 7 |
| 3 | 4 | 8 |
| 4 | 9 |  |
| 5 |  |  |
|  |  |  |

C Number of Geese

| 1 | 0 |  |
| :--- | :--- | :--- |
| 2 | 2 | 7 |
| 3 | 4 | 8 |
| 4 | 9 |  |
| 5 | 0 |  |

## D Number of Geese

| 1 |  |  |  |
| :--- | :--- | :--- | :--- |
| 2 | 2 | 7 |  |
| 3 | 0 | 4 | 8 |
| 4 | 0 | 9 |  |
| 5 |  |  |  |
|  |  |  |  |

3. This circle graph shows the results from the election for class president.

## Class President Results



If 150 students voted, about how many votes did Jamie receive?

A 25
B 38
C 50
D 75
4. The fifth-grade students in Mrs. Lindley's class made a line plot that showed the total amount of time they spent on homework for one night.


Based on the line plot, which statement is true?
A The mode of the data is one hour and twenty minutes.
B The range of the data is one hour and twenty minutes.
C The sum of the data is one hour and twenty minutes.
D The median of the data is one hour.
5. The science class did an experiment. A jar containing water and a thermometer was placed outside for twelve hours. Every hour the temperature was recorded.

## Temperature Readings



About how many degrees did the temperature increase from 7 a.m. to noon?

A $83^{\circ}$
B $45^{\circ}$
C $38^{\circ}$
D $33^{\circ}$
6. Four students put their spelling test scores in a stem-and-leaf plot. Which plot shows the greatest median test score?

A Missy's Spelling Test Scores

| 8 | 4 | 6 | 9 |
| ---: | :--- | :--- | :--- |
| 9 | 3 | 4 |  |
| 10 | 0 | 0 |  |

C David's Spelling
Test Scores

| 8 | 0 | 4 | 8 |
| ---: | :--- | :--- | :--- |
| 9 | 2 | 6 | 8 |
| 10 | 0 |  |  |

B Jarrod's Spelling Test Scores

| 7 | 9 |  |  |
| ---: | :--- | :--- | :--- |
| 8 | 9 | 9 |  |
| 9 | 6 | 7 | 7 |
| 10 | 0 |  |  |

D Farrah's Spelling Test Scores

| 7 | 9 |  |  |
| ---: | :--- | :--- | :--- |
| 8 | 3 | 8 | 9 |
| 9 | 5 |  |  |
| 10 | 0 | 0 |  |

7. Two teachers put the test scores for their math classes in order from lowest to highest.

Mrs. Smith's Class Test Scores Mr. Jones's Class Test Scores

| 75 | 76 | 76 | 78 | 79 |
| :--- | :--- | :--- | :--- | :--- |
| 80 | 81 | 85 | 87 | 89 |
| 89 | 89 | 90 | 91 | 92 |
| 92 | 93 | 95 | 95 | 96 |
| 97 | 98 | 98 | 99 | 100 |


| 72 | 75 | 76 | 77 | 78 |
| :--- | :--- | :--- | :--- | :--- |
| 79 | 79 | 80 | 83 | 85 |
| 87 | 89 | 90 | 90 | 91 |
| 91 | 91 | 91 | 93 | 94 |
| 94 | 95 | 96 | 97 | 98 |

Which statement is true about the comparison of the two sets of test scores?
A Mrs. Smith's class had a higher mode than Mr. Jones's class.
B Mrs. Smith's class had the same median as Mr. Jones's class.
C Mrs. Smith's class had the same range as Mr. Jones's class.
D Mrs. Smith's class had a higher median than Mr. Jones's class.

## End of Goal 4 Sample Items

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## Objective: $\quad 4.01$

Collect, organize, analyze, and display data (including stem-and-leaf plots) to solve problems.
Thinking Skill: Applying Correct Answer: A
Objective: $\quad 4.01$
Collect, organize, analyze, and display data (including stem-and-leaf plots) to solve problems.
Thinking Skill: Analyzing Correct Answer: D
$3 \quad$ Objective: 4.01
Collect, organize, analyze, and display data (including stem-and-leaf plots) to solve problems.
Thinking Skill: Analyzing Correct Answer: C

## Objective: 4.01

Collect, organize, analyze, and display data (including stem-and-leaf plots) to solve problems.
Thinking Skill: Applying Correct Answer: A
$5 \quad$ Objective: 4.01
Collect, organize, analyze, and display data (including stem-and-leaf plots) to solve problems.
Thinking Skill: Applying Correct Answer: D
$6 \quad$ Objective: 4.01
Collect, organize, analyze, and display data (including stem-and-leaf plots) to solve problems.
Thinking Skill: Applying Correct Answer: B
Objective: $\quad 4.03$
Solve problems with data from a single set or multiple sets of data using median, range, and mode.
Thinking Skill: Analyzing Correct Answer: B

