

Independent Practice

Statistics

A.10, A.11, Matrices, CT

Read and solve.

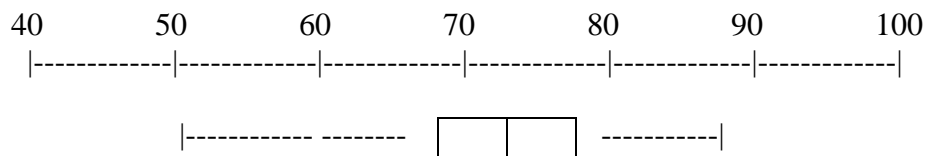
1. In which data set is the median value equal to the mean value?

- A. {2, 4, 6, 7, 8}
- B. {12, 18, 20, 23, 24}
- C. {16, 17, 18, 19, 20}
- D. {50, 60, 65, 75, 85}

2. This is a stem-and-leaf plot of a group of test scores. What is the median score?

A.	Leaf	Stem	73
B.	3 4	5	76
C.	2 4 8	6	77
D.	0 1 2 5 7 7 9	6	77.5
	0 1 2 5 7 7 9	7	
	4 5 6 7	8	
	1 2 4 6	9	

3. This is a box-and-whisker plot of a set of scores.



In which quartile does a score of 76 lie?

- A. 1st
- B. 2nd
- C. 3rd
- D. 4th

Independent Practice continued

4. Jorge made the following stem-and-leaf plot of the weights of the members of the football team he was coaching.

Stem	Leaf
10	9
11	
12	3, 8
13	2, 4, 4, 6, 8
14	1, 3, 5, 5, 9
15	2, 3, 7, 7, 9
16	1, 3, 7, 8, 8, 8, 9
17	3, 8

What was the mode of the weight of the players on the team?

- A. 145
- B. 150
- C. 152
- D. 168

5. Which of the following operations would result in the matrix $\begin{bmatrix} -4 & 2 \\ 6 & 1 \end{bmatrix}$?

A. $2 \begin{bmatrix} -2 & 1 \\ 3 & 0 \end{bmatrix}$

B. $\frac{1}{2} \begin{bmatrix} -2 & 1 \\ 3 & 0 \end{bmatrix}$

C. $\begin{bmatrix} 5 & 5 \\ 4 & 3 \end{bmatrix} - \begin{bmatrix} -1 & -3 \\ -2 & -2 \end{bmatrix}$

D. $\begin{bmatrix} 3 & -1 \\ -2 & 2 \end{bmatrix} + \begin{bmatrix} -7 & 3 \\ 8 & -1 \end{bmatrix}$

Independent Practice –continued

6. Mari and Marc are bowling a 3-game match to determine the top bowler for their league. Marc averaged 163 for his three games. Mari bowled 171 and 145 for her first two games. What is the lowest score possible for her third game if she is to win the championship?

- A. 150
- B. 164
- C. 174
- D. 180

7. If $[Q] = \begin{bmatrix} 2 & 1 \\ -1 & 1 \\ 3 & 4 \end{bmatrix}$ and $[R] = \begin{bmatrix} -7 & 3 \\ -4 & 1 \\ 3 & -2 \end{bmatrix}$ then $[Q] - [R] = ?$

A. $\begin{bmatrix} -2 & 9 \\ 0 & 3 \\ 6 & 9 \end{bmatrix}$

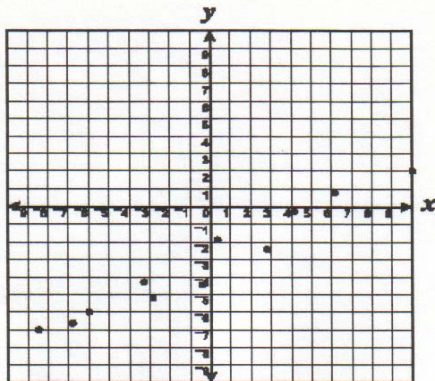
B. $\begin{bmatrix} 9 & -2 \\ 3 & 0 \\ 0 & 6 \end{bmatrix}$

C. $\begin{bmatrix} -5 & 2 \\ -5 & 0 \\ -9 & -6 \end{bmatrix}$

D. $\begin{bmatrix} 7 \\ 3 \\ -11 \end{bmatrix}$

Independent Practice—continued

8.



Which equation best represents the data shown on the scatterplot?

F $y = \frac{x}{2} - 1$

G $y = \frac{1}{2}x - 3$

H $y = x - 3$

J $y = 2x - 5$

9. During a summer reading program, Mary read 9 books. The books contained 217 pages, 138 pages, 159 pages, 356 pages, 270 pages, 112 pages, 138 pages, 210 pages, and 195 pages. What was the median number of pages of the 9 books that Mary read during the summer reading program?

- A. 138
- B. 159
- C. 195
- D. 244

Independent Practice— continued.

10.

Using the median fit method, which scatterplot most likely has a line of best fit represented by $y = -x + 5$?

