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## Test, Form 1A

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Write the letter for the correct answer in the blank at the right of each question.

## For Exercises 1-3, use the scatter plot shown at the right.

1. What type of association is shown in the scatter plot?
A. a negative linear association
B. a positive linear association
C. a positive nonlinear association
D. no association
2. Which of the following statements is

best supported by the scatter plot?
F. As the age of a person increases, the time spent in physical activity increases.
G. As the time spent in physical activity increases, a person's age increases.
H. As the age of a person increases, the time spent in physical activity decreases.
I. There is no relationship between the age of a person and his or her amount of physical activity.
3. Which of the following is a reasonable estimate for the daily amount of physical activity for a person who is 50 years old?
A. 6 h
B. 5 h
C. 4 h
D. 2 h

For Exercises 4 and 5, use the scatter plot shown at the right. The scatter plot shows the length of a metal spring when weights are attached.
4. Which of the following is the most reasonable equation for the line of
 best fit?
F. $y=5 x+9$
G. $y=-5 x+9$
H. $y=-1.5 x+9$
I. $y=1.5 x+9$
4. $\qquad$
5. Which of the following is the most reasonable estimate for the length of a spring when 20 weights are attached?
A. 25 in.
B. 39 in .
C. 54 in .
D. 62 in.
5.
B

Course 3 - Chapter 9 Scatter Plots and Data Analysis
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## Test, Form 1A <br> (continued)

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For Exercises 6 and 7, use the two-way table shown below.

|  | Likes <br> classical music | Dislikes <br> classical music |
| :--- | :---: | :---: |
| Plays an instrument | 15 | 2 |
| Does not plays an instrument | 3 | 25 |

6. What is the relative frequency of students that do not play an instrument and do not like classical music to the total number of students who do not play an instrument? Round to the nearest hundredth.
F. 0.10
G. 0.83
H. 0.88
I. 0.89
7. $\qquad$
8. Which of the following is a valid conclusion about the data?
A. Of the students that like classical music, most do not play a musical instrument.
B. Of the students that like classical music, most play a musical instrument.
C. There were a total of 27 students surveyed.
D. Most of the students surveyed like classical music.
9. B

For Exercises 8 and 9, use the following data set.

$$
2,3,3,4,5,7,8,8,8,10,10,12
$$

8. What are the first and third quartiles of the data?
F. 2,12
G. $4.5,8$
H. 3,10
I. $3.5,9$
9. $\qquad$
10. The standard deviation for the data is 3.23. Which of the following is within one standard deviation of the mean?
A. 2
B. 5
C. 10
D. 12
11. $\qquad$
12. The table given below shows the number of students who attended the Spanish Club meetings during the school year. To the nearest tenth, what is the mean absolute deviation of the data?

| Spanish Club Attendance |  |  |
| :---: | :---: | :---: |
| 14 | 21 | 17 |
| 26 | 13 | 20 |

F. 18.5
G. 13.8
H. 3.8
I. 3.3
10.

H
11. If a data distribution is not symmetric, which should you use to describe the center?
A. mean
B. mode
C. median
D. range
11. $\qquad$

