NAME Key DATE _____ PERIOD _____

Chapter 9 Practice Test

SCORE _____

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

For Exercises 1-4, use the data in the table that shows the ages of people in a ceramics class at a community center.

Age of Class Members			
10	15	19	37
29	8	6	30
20	25	62	15

1. What is the mean absolute deviation?

A. 23 **B.** 15.67 **C.** 11.33 **D.** 9.5 **1.** C

2. Which is an outlier of the data?

F. 6 **G.** 25.5 **H.** 62 **I.** no outliers **2.** H

3. What are the first and third quartiles of the data?

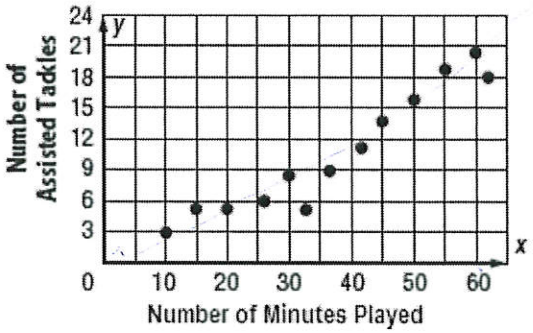
A. 6, 62 **B.** 15, 29 **C.** 10, 30 **D.** 12.5, 29.5 **3.** D

4. The standard deviation of the ages of class members is 14.8. Which of the following best describes the ages that are within one standard deviation of the mean age?

F. 4.7 - 34.3 years **H.** 8.2 - 37.8 years **4.** H

G. 6 - 20.8 years **I.** 47.2 - 62 years

For Exercises 5 and 6, use the scatter plot at the right that shows the number of assisted tackles for various players in one season.



5. What type of association is shown in the scatter plot?

A. positive linear

B. negative linear

C. nonlinear

D. no association

5. A

6. Which of the following is a reasonable estimate for the number of assisted tackles for a player that played for 80 minutes?

F. 9 **G.** 18 **H.** 26 **I.** 40 **6.** I

7. Which is appropriate to describe the spread of data if the data distribution is symmetric?

A. mean **C.** interquartile range

B. median **D.** mean absolute deviation **7.** A

NAME Key DATE _____ PERIOD _____

Chapter 9 Review *(continued)*

SCORE _____

8. A teacher surveyed the students in the cafeteria and found that 35 males like fishing while 15 do not like fishing. There were 45 females surveyed and 24 of them dislike fishing.

a. Complete the two-way table summarizing the data.

8a, b.	Likes Fishing	Dislikes Fishing	Total
Male	35 .625 .63	15 .38	50
Female	21 .38	24 .62	45
Total	56 1.00	39 1.00	95

b. Find the relative frequencies of students by columns. Round to the nearest hundredth if necessary. Write the answer in the table.

c. Interpret the relative frequencies of students by columns.

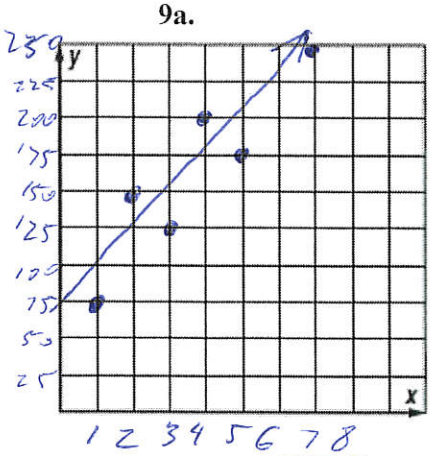
8c. those like fishing are males, dislikes are females

For Exercises 9-11, use the data in the table below. The table shows the membership for a fitness center in the years 2003-2010.

Years Since 2002	1	2	3	4	5	6	7	8
Membership	75	150	125	200	175	300	250	350

9a. Construct a scatter plot for the data.

9a.



9b. Draw and assess a line that seems to best represent the data on the scatter plot.

9b. y = 25x + 55

9c. Write an equation in slope-intercept form for the line of best fit that is drawn.

9c. b = started w/ 75 m = goes up 25 every year

9d. Interpret the slope and *y*-intercept of the line of best fit.

9d. _____

10. Use your equation from Exercise 9c to make a conjecture about the number of fitness center members in the year 2011.

25(9) + 75 10. y = 300

11. Explain in your own words what *mean absolute deviation* means.

11. 1/