Name: $\qquad$

## Homework - Monday (April 1, 2019)

Solve the following problems without a calculator. You $\underline{M U S T}$ show your work. NO WORK = NO CREDIT.

1. Find the mean, median, and mode for the data set:

$$
1,3,8,2,6,3
$$

a. $\quad$ mean $=$
b. $\quad$ median $=$
c. $\quad$ mode $=$
3. In the last 5 games, Kevin Durant scored 22, 22, 18, 12 , and 21 points. What is Durant's mean score per game?
2. Which set of data has a higher mean?

Dillan $=1.1,3.2,4.1,2.2,2.4,3.1$

Kendall $=5.2,1.3,1.2,2.4,3.2,2.1$
4. The mode score on the 8 th grade test was 94 . Which of these interpretations must be correct?
a) 99 was the highest score on the test
b) no student scored below a 50
c) more students received a 94 than any other score
d) a score of 91 was slightly below average

## Homework- Tuesday (April 2, 2019)

Solve the following problems without a calculator. You $\underline{M U S T}$ show your work. NO WORK = NO CREDIT.

| 1. Describe the relationship in the graph. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a) What is the correlation? |  |  |  |  |  |
| b) Identify the dependent and independent variables. | Cookies in the Jar |  |  |  |  |
|  | Time Since Baked (d) | 1 | 2 | 3 | 4 |
|  | Cookies | 24 | 16 | 10 | 7 |

3. Identify the data sets as having a positive, a negative, or no correlation.
$\qquad$ a. The number of hours a person has driven and the number of miles driven.
$\qquad$ b. The number of siblings a student has and the grade they have in math class.
$\qquad$ c. The age of a car and the value of the car.
$\qquad$ d. The number of weeks a CD has been out and the total sales.
4. Write a statement to best describe the correlation of the graph. Is this a positive or negative correlation?

Beach Visitors


Average Daily Temperature ( ${ }^{\circ} \mathrm{F}$ )
4. What kind of trend is shown from this scatter plot? Explain your answer.

| $x$ | 2 | 5 | 10 | 15 | 20 | 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $y$ | 1 | 25 | 21 | 32 | 41 | $?$ |

Solve the following problems without a calculator. You $\underline{M U S T}$ show your work. NO WORK $=$ NO CREDIT.

1. Find the slope of the graph. What is the meaning of slope in this scatter plot?

2. Which set of data would most likely show no correlation when graphed on a scatterplot?
A. number of pets and number of siblings
B. number of sunny days and umbrella sales
C. the age of a tree and the height of the tree
D. time spent studying and grades made in class
3. The scatterplot shows the weight of students according to their height. If the trend continued, about how much would someone weigh if they were 80 inches tall?

4. Find the $y$-intercept of the graph. What is the meaning of the $y$-intercept in this scatter plot?


Homework - Thursday (April 4, 2019)
Solve the following problems without a calculator. You $\underline{\text { MUST }}$ show your work. NO WORK $=$ NO CREDIT.

1. Find the line of best fit.

| Number of Absenses | Final Grade |
| :--- | :---: |
| 0 | 89.2 |
| 1 | 86.4 |
| 2 | 83.5 |
| 3 | 81.1 |
| 4 | 78.2 |
| 5 | 73.9 |
| 6 | 64.3 |
| 7 | 71.8 |
| 8 | 65.5 |
| 9 | 66.2 |

3. Which equation best fits the data?
a) $y=2 / 3 x+2$
b) $y=3 x+2$
c) $y=2 / 3 x+4$
d) $y=x$

4. Write an equation for the line of best fit.

5. Use the trends to make predictions.
a) How many male teachers will there be in 2014 ?
b) In what year were there 40 male teachers?

