Name $\qquad$
Math 8 Regents

Date $\qquad$
Statistics Review

## Directions: Select the choice that best answers each question.

1. Which scatter plot represents no association?
A

B

C

D

2. Which of the points shown on the scatter plot could best be described as an outlier?

A $(4,16)$
C $(16,4)$
B $(15,24)$
D $(7,6)$
3. Which statement best describes the data shown?
4. In the diagram below, lines $p$ and $q$ are parallel. Use the diagram to complete the following statements.

$\Varangle 1$ is vertical to $\Varangle$ $\qquad$
$\Varangle 3$ is alternate interior to $\Varangle$ $\qquad$

D This scatter plot has a non-linear
 association.

9. The scatter plot below represents the relationship between the time spent walking and the amount of weight lost per week.


Based on the data shown, which of the following statements is true?

A As the amount of time increases, the amount of weight loss decreases.
B Only one person walked for more than 3 hours.
C Everyone in this survey lost at least 8 pounds.
D This scatter plot contains a cluster.
11. Pentagon $P$ and pentagon $Q$, shown below are congruent.

10. In the diagram below, parallel lines are cut by a transversal.


Which of the following statements correctly explains the value of $w$ ?

A $103^{\circ}$, because the angles shown are supplementary.

B $77^{\circ}$, because the angles shown are vertical.
C $77^{\circ}$, because the angles shown are corresponding.

D $77^{\circ}$, because the angles shown are alternate interior.

Which sequence could be used to transform pentagon $P$ to pentagon $Q$ ?

A a $180^{\circ}$ clockwise rotation about the origin

B a translation four units left and then a reflection over the x-axis

C a reflection over the $y$-axis and then a translation seven units down

D a translation seven units down and then a $90^{\circ}$ clockwise rotation about the origin
12. John and Steve buy bags of dry pet food and cans of pet food. Each bag costs the same and each can of food costs the same. John pays $\$ 17.20$ for 5 bags and 6 cans of pet food. Steve pays $\$ 11.20$ for 2 bags and 6 cans of pet food. Determine the cost of each bag and can.
Show your work.

Answer $\$$ $\qquad$ for each bag
$\$$ $\qquad$ for each can
13. You randomly survey students about whether they ate or skipped lunch and breakfast. The results of the survey are shown in the two-way table.

Part A Complete the table.

|  |  | Breakfast |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Ate | Skipped |  |
| C | Ate | 40 |  | 52 |
|  | Skipped |  | 0 |  |
|  | Total | 48 |  |  |

Part B How many students in the survey skipped breakfast but ate lunch? $\qquad$

Part C How many students in the survey ate lunch? $\qquad$

Part D How many students were surveyed? $\qquad$
14. Twenty students were surveyed. Eight students get an allowance and do chores. Eight students don't do any chores. Of the students that don't do chores, two of them get allowance.

Part A Complete the table.

|  | Get <br>  <br> Allowance | No <br> Allowance | Total |
| :---: | :---: | :---: | :---: |
| Do Chores |  |  |  |
| Don't do <br> Chores |  |  |  |
| Total |  |  |  |

Part B How many students don't do chores or get an allowance? $\qquad$
Part $C$ What percent of students get an allowance? $\qquad$
15. Tyler collected data to show the relationship between the amount of cereal and the number of berries in his favorite cereal. Use the data table below to construct a scatter plot.

| Cereal <br> Amount <br> (cups) | Number <br> of Berries |
| :---: | :---: |
| 2 | 6 |
| 6 | 12 |
| 12 | 24 |
| 14 | 30 |
| 8 | 18 |
| 4 | 12 |
| 10 | 18 |
| 18 | 42 |
| 16 | 36 |



Does the scatter plot have a positive, negative, or no association? $\qquad$
Describe the situation represented by this data.

