Name: $\qquad$

1. A LEGO ultrasonic sensor is pointed at the wall for 10 seconds. Each second a distance value from the sensor to the wall is measured and recorded. The following set represents the collected data:

| 3.6 cm | 3.7 cm | 3.5 cm | 4.1 cm | 3.7 cm | 3.9 cm | 4.2 cm | 3.7 cm | 3.9 cm | 3.4 cm |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

A. Determine the average distance from the sensor to the wall. Show work to get credit.
B. Determine the median distance from the sensor to the wall. Show work to get credit.
C. Determine the mode of the distances from the sensor to the wall. Show work to get credit.
2. For five algebra examinations, Maria has an average of 88 . What must she score on the sixth test to bring her average up to exactly 90 ? Show work to get credit.
3. The AIBO Entertainment Robot ERS-210 is Sony's 2nd generation robotic dog. The price of the robot over a series of months has been recorded and is presented in the table below:

| $\$ 2000$ | $\$ 1880$ | $\$ 1700$ | $\$ 1650$ | $\$ 1620$ | $\$ 1800$ | $\$ 1550$ | $\$ 1645$ | $\$ 1620$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Compare the quantity in Column A with the quantity in Column B. Which Column is greater? Explain what mode quantity represent in real life terms? Show work to get credit.

| Column A | Column B |
| :---: | :---: |
| mean | median |

4. What did you like or dislike about the lesson?
5. What did you like or dislike about the robotic device?
6. Do you think robotics can be helpful when used to collect data in math experiments?
a. Yes
b. No
c. Unsure
7. Rate this lesson using the following
a. Strongly disliked
c. Liked
b. Disliked
d. Strongly liked
8. What gets you excited about math?
9. Do you think the use robotics to collect data:
a. Made the lesson easier
c. Made no difference in the lesson
b. Made the lesson harder
10. If you were given the chance to create this lesson which method would you use:
a. Research on the internet
d. Conduct hands - on activity
b. Lecture
e. Watch movie
c. Read textbook
