$\qquad$ Date $\qquad$
$\qquad$

### 16.2 Boxplots

For questions $1-6$, refer to the box \& whisker graph below which shows the test results of a math class.

## Test Scores (as \%) for $6^{\text {th }}$ Period



1. What was the high score on the test?
2. What percent of the class scored above a 72?
3. What was the median score on the test?
4. What percent of the class scored between $88 \& 96$ ?
5. Do you think that this test was too hard for the students? Explain, using complete sentence(s).
6. Would you expect the mean to be above or below the median? Explain, using complete sentence(s).

For questions 7 - 11 refer to the box \& whisker graph below that shows how much time was spent per night on homework for sophomore class at a certain high school during September.

Average Minutes Per Night Spent On Homework

$\qquad$ 7. What percent of the sophomores spend more than 60 minutes on homework per night?
$\qquad$ 8. What is the range of times that the middle $50 \%$ of the sophomores spend on homework per night?
$\qquad$ 9. Did at least one sophomore not do his/her homework?
$\qquad$ 10. What percent of the sophomores spend less than 20 minutes per night on homework?
11. Would you expect the mean number of minutes per night to be higher or lower than the median? Explain, using complete sentence(s).

For questions 12-14, use the following data of Duke's basketball's team final scores for the last 7 games they won.

$$
\begin{array}{lllllll}
63 & 68 & 85 & 77 & 84 & 94 & 73
\end{array}
$$

12. Find the five number summary (minimum, lower quartile, median, upper quartile, maximum) of the data.
13. What is the interquartile range?
14. Construct a boxplot.

For questions 15-17, use the following data of the number of DVDs rented each day over two weeks at a video rental store:

$$
\begin{array}{llllllllllllll}
38 & 42 & 50 & 65 & 82 & 91 & 88 & 40 & 34 & 41 & 71 & 93 & 87 & 94
\end{array}
$$

15. Find the five number summary of the data.
16. What is the interquartile range?
17. Construct a boxplot of this data.
