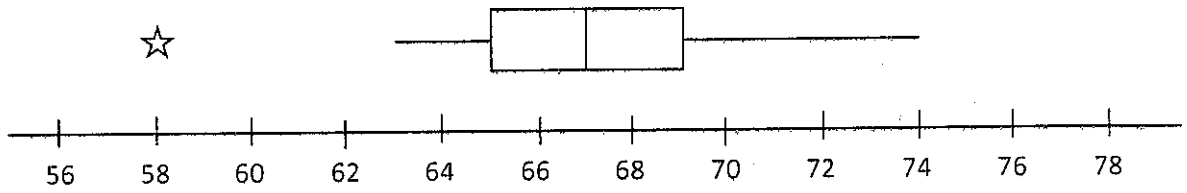
Algebra 2 Statistics Review Answers

1. mean ≈ 66.9 inches
   median = 67 inches
   mode = 68 inches

2. low = 58
   Q_1 = 65
   median = 67
   Q_3 = 69
   high = 74

3. 58 is an outlier.

4.



5. a. 7
   b. about the 42nd percentile
   c. 75th percentile

6. a. $\bar{x} \approx 88.6$
   $\sigma \approx 10.5$
   b. 13
   c. 3

7. Find the standard deviation for the data set by hand: 22, 24, 25, 27, 27

x	$x - \bar{x}$	$(x - \bar{x})^2$
22	-3	9
24	-1	1
25	0	0
27	2	4
27	2	4

$\bar{x} = 25$

$\sigma = \sqrt{\frac{18}{5}} \approx 1.9$

8. $z = 0.375$

9. $z \approx -1.42$

10. a. continuous quantitative
    b. categorical
    c. discrete quantitative

11. a. skewed to the right
    b. symmetrical

12. The type of bias in this situation is voluntary response. Only the students who feel strongly about the food will take the time to fill out and turn in the survey. A better way would be to find a random sample of all the students in the school and have them fill out the survey.

13. b. 81.5%
    c. 84%
    d. about 6
    e. about 156

14. a. about 16%
    b. about 6