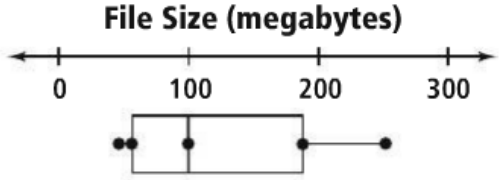
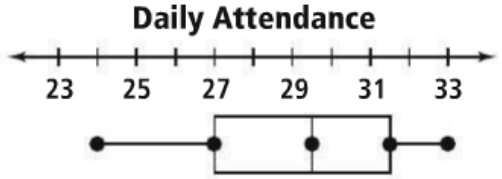
8. 48, 54, 100, 188, 256



9. 24, 27, 29.5, 31.5, 33



10. Class B

11. the box

12. 88

13. 75%; the third quartile is the value that divides the data so that about 75% of the data lies below and about 25% of the data lies above.

14. No; the test is scored on point values from 0 to 100, whereas the percentile rank tells you how you did in reference to the rest of the group.

15. $90 \leq x < 94$

16. The range gives the difference between the greatest and least values, while the interquartile range gives the difference between the third and first quartiles.

17. $0 < h < 73.5$

18. Check students' work.

19. No; it could also be equal to the maximum value, which could happen if the top quarter of the scores all have the same value.

20. **a.** Device 1; the range is smaller.

b. Device 2; Device 1; Device 2 has 25% of its packages below 17 oz, while Device 1 has more than that. Device 1 has 25% of its packages greater than 17.2 oz, while Device 2 has about 50% of its packages greater.

21. You cannot determine all of the data values by looking at the plot, so you cannot determine the mean or the mode. You can only find the median, which is the value at the line in the box.

22. 91