Find the mean, median and mode of the data.

1. 10, -4, 3, -1, 12 Mean: 4, Median: 3, No Mode

2. 1.25, 3.80, -0.65, -2.40 Mean: 0.5, Median: 0.3, No Mode

3.

0	4 5 6 8 8
1	0 2 3 5
2	1 1 5
3	0 2

Mean: 15, Median: 12.5, Modes: 8, 21

Key: 0|6 = 6

Find the value of x.

4. Mean is 2; -4, -2, 3, x, 9

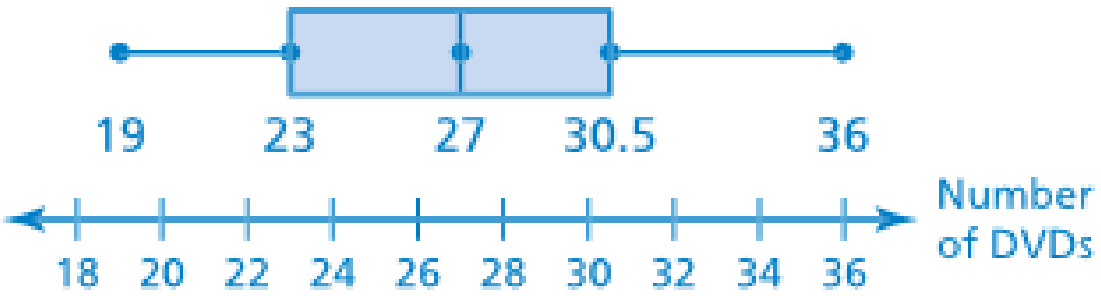
$x = 4$

5. Median is 16.5; 8, 11, x, 18, 24, 26

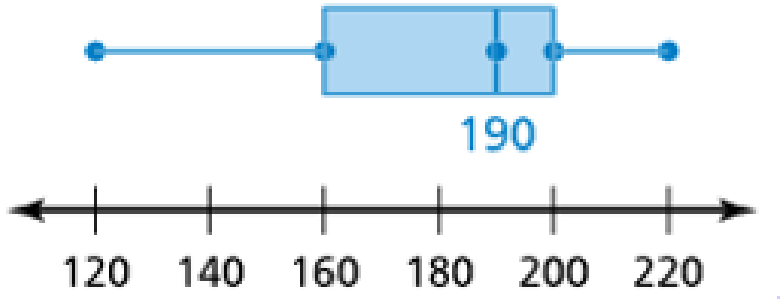
$x = 15$

6. Make a box-and-whisker plot for the number of DVDs your class owns.

25, 31, 27, 36, 19, 22, 20, 24, 30, 32, 29, 27



7. You have written several fiction stories about your favorite television character and posted them on the Internet. The box-and-whisker plot represents the number of reader reviews each of your stories received.



a. Find and interpret the range of the data.

The range is 100. This means that the reader reviews vary by no more than 100.

b. Describe the distribution of the data.

25% of the reader reviews are between 120 and 160.
50% of the reader reviews are between 160 and 200.
25% of the reader reviews are between 200 and 220.

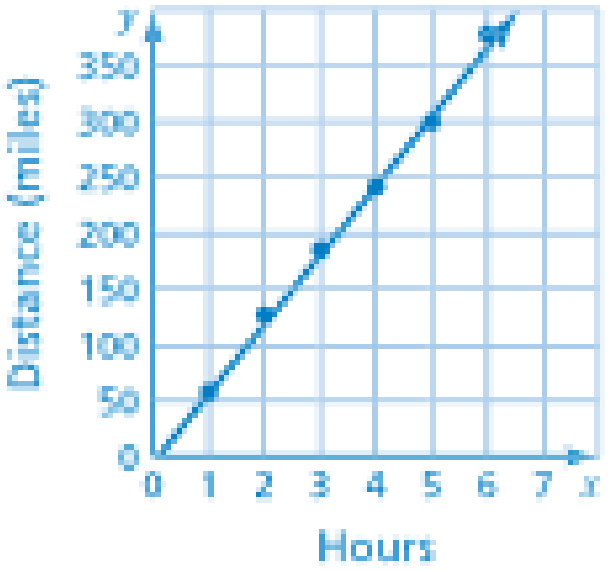
c. Find and interpret the interquartile range of the data.

The interquartile range is 40. This means that the middle half of the reader reviews vary by no more than 40..

8. **The table shows the distance you travel over a 6-hour period.**

Hours, x	Distance (miles), y
1	60
2	130
3	186
4	244
5	300
6	378

a. Make a scatter plot of the data and draw a line of fit.



b. Write an equation of the line of fit.

$$y = 60x$$

c. Interpret the slope of the line of fit.

The slope of the line of fit is 60 which means the number of miles traveled each hour is about 60.

d. Predict the distance traveled after 7 hours.

About 420 miles

9. The equation $y = 2x + 1$ models the data in the table. Calculate the residuals. Then make a scatter plot and interpret the results.

x	1	2	3	4	5	6
y	4	6	10	11	14	14

The points (x, residual) are all above the horizontal axis. So, the equation $y = 2x + 1$ does not model the data well.