NAME _____ DATE _____ PERIOD ____

12-6 Skills Practice

Statistical Measures

Find the variance and standard deviation of each set of data to the nearest tenth.

1. {32, 41, 35, 35, 46, 42} 23.6, 4.9
2. {13, 62, 77, 24, 38, 19, 88} 763.8, 27.6
3. {89, 99, 42, 16, 42, 71, 16} 959.1, 31.0
4. {450, 400, 625, 225, 300, 750, 650, 625} 30,537.1 ; 174.7
5. {17, 23, 65, 94, 33, 33, 33, 8, 57, 75, 44, 12, 11, 68, 39} 630.7, 25.1
6. {7.2, 3.1, 3.8, 9.5, 8.3, 8.4} 5.8, 2.4
7. {1.5, 2.5, 3.5, 4.5, 4.5, 5.5, 6.5, 7.5} 3.5, 1.9

For Exercises 8 and 9, use the table that shows the profit in billions of dollars reported by U.S. manufacturers for the first quarter of the years from 1997 through 2001.

Year	1997	1998	1999	2000	2001
Seasonally-Adjusted Profit ($ billions)	$61.4	$75.6	$60.9	$78.5	$45.3

Source: U. S. Census Bureau

8. Find the mean and median of the data to the nearest tenth. 64.3 billion, 61.4 billion

9. Which measure of central tendency best represents the data? Explain.

median, 45.3 isn't close to the other data points and lowers the mean

For Exercises 10 and 11, use the table that shows the percent of fourth grade students reading at or above the proficiency level in a nationally-administered reading assessment.

Year	1992	1994	1998	2000
Percent at or above proficiency level	29%	30%	31%	32%

Source: National Center for Education Statistics

10. Find the mean, median, and standard deviation of the data to the nearest tenth.

30.5%, 30.5%, 1.1%

11. What do the statistics from Exercise 11 tell you about the data?

percent of students reading at or above doesn't vary much over the years because the mean, median are = and σ is small.