

Practice 1-6

Mean, Median, Mode, and Range

Find the mean, median, and mode. Which measure of central tendency best describes the data?

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| <p>1. number of cars sold in the past 10 days
1 5 3 2 1 0 4 2 6 1</p> <p>3. prices of a sweater in 5 different stores
\$31.25 \$27.50 \$28.00 \$36.95 \$32.10</p> | <p>2. utility bills for the past 6 months
\$90 \$120 \$140 \$135 \$112 \$126</p> <p>4. scores on a 10-point quiz
7 9 10 8 4 2 6 10 8</p> |
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Find the range.

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| <p>5. hourly wages
\$7.25 \$6.75 \$8.10 \$9.56 \$7.10 \$7.75</p> | <p>6. ages of students on the quiz team
15 15 14 16 17 16 16 15</p> |
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Write and solve an equation to find the value of x .

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| <p>7. 4.8, 1.6, 5.2, x; mean 3.7</p> <p>9. 100, 172, 85, 92, x; mean 115</p> <p>11. A coffee machine is considered reliable if the range of amounts of coffee that it dispenses is less than 2 fluid ounces (fl oz). In eight tries, a particular machine dispensed the following amounts: 7.1, 6.8, 7.6, 7.1, 7.4, 6.8, 7, and 6.7 fl oz. Is the machine reliable? Explain.</p> <p>12. To test the exhaust fumes of a car, an inspector took six samples. The exhaust samples contained the following amounts of gas in parts per million (ppm): 8, 5, 7, 6, 9, and 5. If the maximum allowable mean is 6 ppm, did the car pass the test? Explain.</p> <p>13. Randy had grades of 85, 92, 96, and 89 on his last four math tests. What grade does he need on his next test to have an average of 92?</p> <p>14. a. A bakery collected the following data about the number of loaves of fresh bread sold on each of 24 business days. Make a stem-and-leaf plot for the data.</p> <table border="0" style="margin-left: 20px;"> <tr> <td>43</td><td>39</td><td>17</td><td>38</td><td>50</td><td>42</td><td>34</td><td>28</td><td>37</td><td>42</td><td>40</td><td>33</td> </tr> <tr> <td>72</td><td>36</td><td>45</td><td>21</td><td>29</td><td>44</td><td>41</td><td>37</td><td>40</td><td>35</td><td>51</td><td>54</td> </tr> </table> | 43 | 39 | 17 | 38 | 50 | 42 | 34 | 28 | 37 | 42 | 40 | 33 | 72 | 36 | 45 | 21 | 29 | 44 | 41 | 37 | 40 | 35 | 51 | 54 | <p>8. 40, 98, 94, 102, 21, x; mean 88</p> <p>10. 25.6, 19.3, 19, x, mean 24</p> |
| 43 | 39 | 17 | 38 | 50 | 42 | 34 | 28 | 37 | 42 | 40 | 33 | | | | | | | | | | | | | | |
| 72 | 36 | 45 | 21 | 29 | 44 | 41 | 37 | 40 | 35 | 51 | 54 | | | | | | | | | | | | | | |

b. Find the mean, median, mode(s), and range of the data.

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| <p>15. The back-to-back stem-and-leaf plot shows the number of calls made to each of two police departments in the last 14 days. Find the mean, median, mode(s), and range of each side of the stem-and-leaf plot.</p> | <p>16. The back-to-back stem-and-leaf plot shows the average daytime temperature (in °F) at two different locations for each of the past 15 weeks. Find the mean, median, mode, and range of each side of the stem-and-leaf plot.</p> |
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Dept. A	Dept. B
9 5 2	3 1 4
8 6 2 1	4 7 9 9
8 8 8 2	5 0 2 2 2 4
3 2 1	6 1 1 3
	7 1

Locn. A	Locn. B
9 8 7	6 5 6 6 7 9
7 5 1 0	7 2 4 5 6 8
9 4 3 3 1	8 0 4 7 9
1 0 0	9 1