

## 6.SP.B.5 Compare Measures of Central Tendency and Dispersion

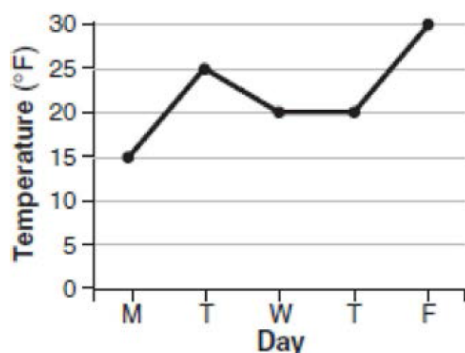
6.SP.B.5 Summarize numerical data sets in relation to their context

- 1 The weights of all the students in grade 9 are arranged from least to greatest. Which statistical measure separates the top half of this set of data from the bottom half?
  - 1) mean
  - 2) mode
  - 3) median
  - 4) average
- 2 Which statement is true about the data set 3, 4, 5, 6, 7, 7, 10?
  - 1) mean = mode
  - 2) mean > mode
  - 3) mean = median
  - 4) mean < median
- 3 Sam's grades on eleven chemistry tests were 90, 85, 76, 63, 94, 89, 81, 76, 78, 69, and 97. Which statement is true about the measures of central tendency?
  - 1) mean > mode
  - 2) mean < median
  - 3) mode > median
  - 4) median = mean
- 4 Which statement is true about the data set 4, 5, 6, 6, 7, 9, 12?
  - 1) mean = mode
  - 2) mode = median
  - 3) mean < median
  - 4) mode > mean
- 5 From January 3 to January 7, Buffalo recorded the following daily high temperatures: 5°, 7°, 6°, 5°, and 7°. Which statement about the temperatures is true?
  - 1) mean = median
  - 2) mean = mode
  - 3) median = mode
  - 4) mean < median
- 6 The ages of five children in a family are 3, 3, 5, 8, and 18. Which statement is true for this group of data?
  - 1) mode > mean
  - 2) mean > median
  - 3) median = mode
  - 4) median > mean
- 7 Melissa's test scores are 75, 83, and 75. Which statement is true about this set of data?
  - 1) mean < mode
  - 2) mode < median
  - 3) mode = median
  - 4) mean = median

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- 8 The accompanying graph shows the high temperatures in Elmira, New York, for a 5-day period in January.



Which statement describes the data?

- 1) median = mode
  - 2) median = mean
  - 3) mean < mode
  - 4) mean = mode
- 9 Alex earned scores of 60, 74, 82, 87, 87, and 94 on his first six algebra tests. What is the relationship between the measures of central tendency of these scores?
- 1) median < mode < mean
  - 2) mean < mode < median
  - 3) mode < median < mean
  - 4) mean < median < mode
- 10 Kelsey scored the following points in her first six basketball games: 22, 14, 19, 22, 8, and 17. What is the relationship between the measures of central tendency of these data?
- 1) mode > median > mean
  - 2) median > mode > mean
  - 3) mean > median > mode
  - 4) mode > mean > median
- 11 The test scores for five students were 59, 60, 63, 76, and 87. How many points greater than the median is the mean?

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### Answer Key

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1 ANS: 3

2 ANS: 3

mean = 6, median = 6 and mode = 7

3 ANS: 1

mean =  $81\frac{7}{11}$ , median = 81 and mode = 76

4 ANS: 2

mean = 7, median = 6 and mode = 6

5 ANS: 1

mean = 6, median = 6 and mode = 5, 7.

6 ANS: 2

mean = 7.4, median = 5 and mode = 3

7 ANS: 3

mean = 77.7, median = 75 and mode = 75

8 ANS: 1

9 ANS: 4

The mean is  $80.\bar{6}$ , the median is 84.5 and the mode is 87.

10 ANS: 1

The mean is 17, the median is 18 and the mode is 22.

11 ANS:

6