

# Mean and Median Worksheet

Key

1. Calculate the mean, median, and mode for the following set of data:

5.00 4.21 4.97 5.00 5.00 5.29 5.05 5.50 5.79 5.00 5.40  
 5.20 5.10 5.06 4.50 4.50 5.50 4.50 5.00 5.00 5.50

$$\text{Mean} = \frac{\text{Sum of numbers}}{\text{total}} = \frac{106.07}{21} = 5.05$$

$$\text{Median} = \text{middle number} = 5.00$$

$$\text{Mode} = \text{most often} = 5.00$$

2. A sample of random students were asked how many times did they check their phones during school. The results were 3, 0, 8, 7, 10, 7, 6, 12. Calculate the mean and median:

$$\text{mean} = \frac{48}{8} = 6$$

$$\text{median} = 0, 7, 7, 8, 10, 12$$

$$\frac{7+8}{2} = 7.5$$

3. Angelina made scores of 85, 56, and 91 on her first three statistic tests. What does she need to make on her next test to have an 80 test average?

$$\frac{85 + 56 + 91 + x}{4} = 80$$

$$\frac{232 + x}{4} = 80$$

$$\begin{array}{r} 320 = 4(80+x) \\ -232 \\ \hline x = 88 \end{array}$$

4. Mr. Plum's math class of 25 students had an average of 85 on a test. Miss Scarlet's class of 22 students had an average of 87 on the same test. What is the average of the two classes combined?

$$\frac{85 + 87}{2} = \frac{172}{2} = 86$$

5. Consider the time that it takes the faculty of AKHS to drive to school. The mean and median times are calculated. Of the times, 40 minutes and 25 minutes, which is the mean and which is the median? Why?

Mean = 40 mins (same people could take longer or shorter - perhaps 1 hour - this is in the middle/outliers involved)

Median = 25 mins

6. Of 500 high school students whose mean height is 67.8 inches, 150 were girls. If the mean height of the girls was 63.0 inches, what is the mean height of the boys?

$$\frac{150(63.0) + 350(x)}{500} = 67.8$$

$$\begin{array}{r} 9450 + 350x = 33900 \\ 350x = 24450 \\ x = 69.9 \end{array}$$

