## Ready, Set, Go!

## Ready



Topic: Drawing histograms.
Mr. Austin gave a ten-point quiz to his $9^{\text {th }}$ grade math classes. A total of 50 students took the quiz. Mr. Austin scored the quizzes and listed the scores alphabetically as follows.

| $1^{\text {st }}$ Period Math | $2^{\text {nd }}$ Period Math | 3rd Period Math |
| :--- | :--- | :--- |
| $6,4,5,7,5$, | $4,5,8,6,8$, | $9,8,10,5,9$, |
| $9,5,4,6,6$, | $9,5,8,5,1$, | $7,8,9,8,5$, |
| $8,5,7,5,8$, | $5,5,7,5,7$ | $8,10,8,8,5$ |
| $1,8,7,10,9$ |  |  |

1. Use the ALL $\mathbf{5 0}$ quiz scores to find the five number summary of all of Mr. Austin's classes.

Minimum:
Quartile 1:
Median:
Quartile 3:
Maximum:
2. Create a box and whiskers plot of ALL the quiz scores.
3. Create a histogram for the data using an interval of 2 on the $x$-axis.
4. Describe the data distribution of the histogram you created. Include the type, shape, spread, and center.

Set

| $1^{\text {st }}$ Period Math | $2^{\text {nd }}$ Period Math | 3rd Period Math |
| :--- | :--- | :--- |
| $6,4,5,7,5$, | $4,5,8,6,8$, | $9,8,10,5,9$, |
| $9,5,4,6,6$, | $9,5,8,5,1$, | $7,8,9,8,5$, |
| $8,5,7,5,8$, | $5,5,7,5,7$ | $8,10,8,8,5$ |
| $1,8,7,10,9$ |  |  |

Using the same data from Mr. Austin's classes as above:
5. Find the mean and median of Mr. Austin's $1^{\text {st }}$ period class. Then add two quiz scores to $1^{\text {st }}$ Period that will keep the median the same, but raise the mean. [Note: the new scores must be whole numbers less than or equal to 10]

| Original Mean: | Quiz Scores Added | New Mean: |
| :---: | :---: | :---: |
|  |  |  |
| Original Median: |  |  |
|  |  | New Median: |

6. Find the standard deviation of Mr. Austin's $2^{\text {nd }}$ period class. Then add two quiz scores to $2^{\text {nd }}$ period that will lower the standard deviation. [Note: the new scores must be whole numbers less than or equal to 10]

| Original Standard Deviation: | Quiz Scores Added | New Standard Deviation: |
| :--- | :--- | :--- |
|  |  |  |

Go
Write equations for the following exponential graphs [Hint: These are exponential. Not linear. Don't use $y=m x+b$. DO USE $\left.\boldsymbol{y}=\boldsymbol{a} \cdot \boldsymbol{b}^{\boldsymbol{x}} \odot\right]$

© 2012 Mathematics Vision Project| MVP

