

Name \_\_\_\_\_  
Teacher \_\_\_\_\_

Date \_\_\_\_\_

6th Grade Math (Statistics) Enrichment #5 (Lesson 28-2)

**Ready:**

1. All the students on your track team are timed as they run one mile. Here are the times rounded to the nearest minute:

**7, 9, 12, 11, 8, 9, 18, 10, 6, 11, 9, 8, 7, 8, 10, 8, 12, 7, 7, 10**

Construct a dot plot for the times listed above.

2. Find the median of the times with the outlier and without the outlier.
3. What is the mean of the times?

**Set:**

4. A sixth grade class must raise at least \$100 to go on a field trip. They have collected \$20 so far. Write an inequality to represent the amount of money,  $m$ , the class still needs to raise. Represent this inequality on a number line.

5. Write an expression or equation for the following:

(a) An amusement park charges \$28 to enter and \$0.35 per ticket. Write an algebraic expression to represent the number of crayons that Maria has.

(b) Andrew has a summer job doing yard work. He is paid \$15 per hour and a \$20 bonus when he completes the yard. He was paid \$85 for completing one yard. Write an equation to represent the amount of money he earned.

6. Evaluate the following expression when  $x=4$  and  $y=2$ .

$$\frac{x^2 + y^2}{3}$$

**Go:**

7. The following table lists four of the greatest New York Yankees' home run hitters with the number of home runs each hit while a Yankee.

| Babe Ruth |           | Lou Gehrig |           | Mickey Mantle |           | Roger Maris |           |
|-----------|-----------|------------|-----------|---------------|-----------|-------------|-----------|
| Year      | Home runs | Year       | Home runs | Year          | Home runs | Year        | Home runs |
| 1920      | 54        | 1923       | 1         | 1951          | 13        | 1960        | 39        |
| 1921      | 59        | 1924       | 0         | 1952          | 23        | 1961        | 61        |
| 1922      | 35        | 1925       | 20        | 1953          | 21        | 1962        | 33        |
| 1923      | 41        | 1926       | 16        | 1954          | 27        | 1963        | 23        |
| 1924      | 46        | 1927       | 47        | 1955          | 37        | 1964        | 26        |
| 1925      | 25        | 1928       | 27        | 1956          | 52        | 1965        | 8         |
| 1926      | 47        | 1929       | 35        | 1957          | 34        | 1966        | 13        |
| 1927      | 60        | 1930       | 41        | 1958          | 42        |             |           |
| 1928      | 54        | 1931       | 46        | 1959          | 31        |             |           |
| 1929      | 46        | 1932       | 34        | 1960          | 40        |             |           |
| 1930      | 49        | 1933       | 32        | 1961          | 54        |             |           |
| 1931      | 46        | 1934       | 49        | 1962          | 30        |             |           |
| 1932      | 41        | 1935       | 30        | 1963          | 15        |             |           |
| 1933      | 34        | 1936       | 49        | 1964          | 35        |             |           |
| 1934      | 22        | 1937       | 37        | 1965          | 19        |             |           |
|           |           | 1938       | 29        | 1966          | 23        |             |           |
|           |           | 1939       | 0         | 1967          | 22        |             |           |
|           |           |            |           | 1968          | 18        |             |           |

Source: Macmillan Baseball Encyclopedia, 4<sup>th</sup> edition

Find the median of the home runs for each player.

8. Referring back to the previous lesson (Enrichment #4), of the two values, mean and median, that you computed for each player, which do you think best describes the performance of each player? Explain why.