

$$B > \frac{1}{n} \sum_{i=1}^n x_i$$

(Be greater than average)

Potpourri – 5th Grade

- 2 points:** What is the sum of the next three numbers in the following sequence?

2, 5, 11, 23, 47, __, __, __
- 2 points:** How many positive integers have a square root between, but not equal to, 2 and 15?
- 2 points:** What is the smallest positive two-digit number that is equal to twice the product of its digits?
- 3 points:** A fraction that is equivalent to the decimal 0.0125 has a numerator of 5. What is the denominator?
- 3 points:** If the reciprocal of 0.2015 is rounded to the nearest hundredth, what is the result?
- 3 points:** A unique movie theater wants each row to contain a different number of seats and for the number of seats in each row to be a prime number. What is the greatest number of rows the theater would need in order to have exactly 160 seats?
- 3 points:** What is the greatest common factor of the number that is the least common multiple of 3 and 5, and the number that is the least common multiple of 12 and 15?
- 4 points:** Using each of the digits 1 through 6 exactly once to form two three-digit numbers, what is one-third of the smallest possible sum of the two numbers?
- 4 points:** The digits 2, 0, 1, and 5 are written in that order the first time. The second time, the digits are written starting with the 0: 0152. Each following occurrence starts with the next rightmost digit, resulting in the pattern of 2015, 0152, 1520, 5201, 2015, etc. What is the sum of the 2014th, 2015th, and 2016th digits that would be written?
- 4 points:** What is the sum of the digits when the base-10 number 2015₁₀ is written in base 3?