2015 Washington State Math Championship

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

## Mental Math – 5<sup>th</sup> Grade

(Be greater than average)

- 1. A fair six-sided die is rolled twice. What is the probability that the first number rolled will be even and the second number rolled will be odd? Express your answer as a reduced fraction.
- 2. What is the positive difference between two-thousand fifteen and one-thousand seventy?
- 3. What number, when divided by nine, is equal to seventy-two?
- 4. Xavier is twice the age of Yolanda, who is a third of the age of Zachary. If Zachary is twelve years old, how old is Xavier?
- 5. The measure of one of the angles in a right triangle is sixty-four degrees. What is the degree measure of the smallest angle in that triangle?

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- 6. What is one-fifth of two-thousand fifteen?
- 7. Suppose that the temperature is currently twenty-four degrees and will rise six degrees each hour. What will the temperature be in nine hours?
- 8. Three-fourths is equivalent to how many thirty-sixths?
- 9. What is the perimeter of a rectangle whose length is twenty and width is fifteen?
- 10. What is the remainder when eight-thousand, four-hundred twenty-nine is divided by eight?

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- 11. How many prime numbers are greater than one and less than twenty?
- 12. What is the average of the first four positive even numbers?
- 13. What is the sum of half the degree measure of a right angle and one-fourth the degree measure of a straight angle?
- 14. What is the product of twenty-three and twenty-one?
- 15. What is the sum of the positive integers between eight and fifteen, inclusively?

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- 16. What is the positive difference between one-sixth and two-thirds? Express your answer as a reduced fraction.
- 17. Start with eight squared. Subtract the number of sides on a trapezoid. Finally, divide by five. What is the final result?
- 18. What is the area of a right triangle with side lengths of five, twelve, and thirteen?
- 19. Siri buys three pounds of apples that cost sixty-five cents per pound. If she pays with a ten dollar bill, how many cents will she receive as change?
- 20. If M is equal to three-fourths, what is the value of thirty-two times M?