2015 Washington State Math Championship
$B>\frac{1}{n} \sum_{i=1}^{n} x_{i}$

## Mental Math $-5^{\text {th }}$ 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 $M$ ?
