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| https://word-edit.officeapps.live.com/we/GetImage.ashx?Fi=SD9BB760AE1BB76%212436&C=1__BAY-SKY-WAC-WSHI&ObjectDataBlobId=%7Bfe18c728-a08d-5fb2-b8a9-4b09165fd2df%7D%7B1%7D&Word=1 | WSMA Math Bowl – January 23, 2016Time Attack  |

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| 1 | There are 100 players playing in a single elimination tennis tournament. Every round, each player is randomly paired up with someone else for a match. The loser of each match is eliminated. If this repeats until only one player is left standing, how many total rounds will have been played? |
| 2 | Three friends are sharing some pizza. They order one small and one large pizza. Small pizzas have a diameter of eight inches. In order to give everyone the exact same amount of pizza, one person eats the entire small pizza, and the other two split the large one evenly. What is the diameter of the large pizza? |
| 3 | Andy is biking one hundred miles from A to B. At the same time, Jake is driving his car from B to A. Little does Andy know, Jake is a negligent driver and always ends up driving on bike routes. If Andy is travelling constantly at 20mph, Jake is driving at 90 mph, and both start at the same time, how far away from city A will they collide? |
| 4 | Order the following from greatest to lowest: 215, 512, 89, 116. Separate each number by a comma. |
| 5 | There are 5 brown socks, 3 red socks, 10 yellow socks, 7 blue socks, 8 green socks, and 7 purple socks in a drawer. What is the least number of socks i need to take out of this drawer without looking to guarantee that i have at least one pair of each colored sock? |
| 6 | The diameter of each circle in the diagram below is 8 centimeters. What is the area that is shaded?https://lh3.googleusercontent.com/V0xOXF5fkPvn5Im3lm6AUot-qt_AeXm50a0o5Rr7-RF2Ba9BKaGPrJ4xVYGbZfMdAw36YLz41DOw6xnZdQMQdpI-qI5jW3ZAaTZmekfGu8Xjo6AgpxXfP0HbGnY9R8ElsZPHb18G |
| 7 | Jessica is in a kayak traveling upstream, starting at Point A. It takes her 40 minutes to get to Point B 2 miles upstream. It takes her 15 minutes to travel downstream to get back to Point A. How fast is Jessica’s kayaking speed in miles per hour? |
| 8 | How many primes are the sum of two primes that are both greater than 2? |
| 9 | How many ways are there to distribute 7 identical dog treats to 3 dogs? Not every dog has to receive a treat. |
| 10 | Bob is standing on the ground 5ft away from a building. His friend, Joe, is standing on the top of the building, 15ft in the air. If Bob threw a ball in a straight line from where he stood to Joe, how far did the ball travel? Assume there is no gravity. |
| 11 | If x is five plus twice y, and y is five less than three times x, what is xy? |
| 12 | Prime factorize 2016. |
| 13 | How many ways can you arrange the word BANANABANANZA? |
| 14 | What is the inverse of this statement: If I am in WSMA, I wear a blue t-shirt. |
| 15 | How many ounces of pure water must be added to 30 ounces of a 40% solution of acid to yield a solution that is 20% acid? |
| 16 | What is the remainder when 235 is divided by 7? |
| 17 | How many of the first 50 positive integers have an odd number of divisors?  |
| 18 | You are given a circular coin with a square hole ABCD in the middle. The square and the circle share center O. The circle circumscribing ABCD is 1/4 the area of Circle O. The area of the outer circle is 10. What is the area of ABCD?  |
| 19 | I have a geometric sequence that goes 3, x, y, 24. What is the sum of x and y? |
| 20 | What is the smallest number that when divided by 4 leaves a remainder of 3 and when divided by 5 leaves a remainder of 4? |
| 21 | There are a 7 people in a room. You must choose two to help you lift your suitcase, but Ally and Jill insist that they cannot be separated. How many ways are there to pick your helpers?  |
| 22 | The area of a triangle is 59. If all of the side lengths are doubled, what is the new area?  |
| 23 | If Kunaal starts work at 7:00 AM in London, which is 8 hours ahead of Seattle, and ends work at 10 PM on the same day in New York, which is 3 hours ahead of Seattle, how long did he work in minutes? |
| 24 | How many nonnegative integers under 1,000 do not contain the digit 5? |