



Name: \_\_\_\_\_ School: \_\_\_\_\_

## 8-6-24 Alpha Contest

### Sample Test 2

Correct answers are worth 1 point. Incorrect and blank answers are worth 0 points. You are given 30 minutes to complete the test and no calculators are allowed.

1. \_\_\_\_\_ Aarush buys 12 cookies at the grocery store. He gives 5 cookies to Aaron, 3 cookies to Adam, and 2 cookies to Aurora. How many cookies does he have left?
2. \_\_\_\_\_ What is 25% of 20% of 80?
3. \_\_\_\_\_ There are 3 green balls and 4 red balls in a bag. If a ball is randomly chosen from the bag, what is the probability that the ball is green?
4. \_\_\_\_\_ How many arrangements of the digits 2007 are four digit numbers? For instance, 7200 is a valid arrangement.
5. \_\_\_\_\_ Find the number of two-digit positive integers whose digits sum to 6?
6. \_\_\_\_\_ A sequence begins with 2. To get the next element in the sequence, you add 3 to the previous element. So the sequence follows 2, 5, 8, ... What is the fourteenth element in the sequence?