



Name: _____ School: _____

8-7-24 Alpha Contest

Sample Test 1

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. _____ The legs of a right triangle are 5 and 12. What is the length of hypotenuse?
2. _____ Two numbers sum to 11 and multiply to 18. What are the two numbers?
3. _____ One-half some number is equal to that number minus 15. What is the number.
4. _____ A bathtub is emptied and begins being filled with water. Water comes into the bathtub at 5 liters per second, and leaves the bathtub at 3 liters per second. After 7 seconds, how much water is in the bathtub?
5. _____ What is the volume of a sphere with radius 4?
6. _____ If there are 4 people and each person shakes hands with every other person, then how many handshakes occur?