Workout BB

1. _____ George gave Bob half of his nickels. A couple of hours later, George gave Jenny one fourth of his remaining nickels. Shortly after that, George's dad took half of the nickels that George had left. If George then had 12 nickels, how many nickels did George give to Bob?

2. _____seeds___ A farmer plants crops within a fenced field in the shape of a right triangle. He wants to spread seed so that there is an average of 1 seed per square inch. If the smallest angle of the fenced right triangle is 30 degrees and the hypotenuse is 80 feet long, how many seeds must he plant in the field? Round your answer to the nearest thousand.

3. _____% What is the perimeter of a triangle with its vertices at (-6, -2), (4, 6), and (2, 10)? Express your answer as a decimal rounded to the nearest tenth.

4. _____ Arnold sold two houses, each for $265,000. He made a profit of 30% on one house, and sold the other at a 30% loss. What total percent did he lose on the sale of both houses?

5. _____ In rectangle ABCD, point Z lies on segment BC such that BZ = ¼BC. AB = 24 and DA = 36. What is the number of square units in the area of triangle ZCD?

6. _____ 20% of the male students at Carnage Middle School buy lunch in the cafeteria. The number of female students who buy lunch is 80% of the number of male students who buy lunch, but there are 20% more female students at Carnage than males. If 48 female students buy lunch, how many students attend Carnage Middle School?

7. _____ John is twice as old as his son Mark, but in 42 years the ratio of their ages will be 4:3. What is Mark's current age in years?

8. _____ An awesome number is a number that is the product of two consecutive primes, for example, 77 is awesome because 7 x 11 = 77. What is the least common multiple of the 3 smallest awesome numbers? AWESOME

9. _____ft A bouncy ball is dropped from a helicopter flying at a height of 1,500 feet. Each time the ball hits the ground it bounces straight back up 2/25 of the height from which it just fell. How many feet will the ball have traveled when it hits the ground for the fourth time? Express your answer as a decimal rounded to the nearest thousandth.

10. _____points In the game of Bing Bong, there are two ways to score. A smash is worth 7 points, and a bash is worth 9 points. What is the greatest score that cannot be attained in a game of Bing Bong?