Member: _____ Math Club

Mathematics League Competition
Practice Problems – Worksheet 2

1) (4 + 3) x (5 + 2) x (6 +1)

a) 3 x 7 b) 7 x 7 c) 3^7 d) 7^3

2) Ben finished wrapping 30 boxes at 1:30 PM. If Ben wrapped 1 box every 5 minutes, then he started wrapping the boxes at what time?

a) 10:30 b) 11:00 c) 11:30 d) 11:50

3) One prime factor of 351 is 3. Another prime factor of 351 is

a) 7 b) 13 c) 39 d) 117

4) The measure of the smallest and largest angles of a right triangle could differ by

a) 1 degree b) 30 degrees c) 62 degrees d) 91 degrees

5) Of the 20 chess pieces on a board, 12 are white and the others are black. The ratio of black pieces to all pieces is what?

6) What is the product of the reciprocals of the first three integers that are the squares of positive integers?

a) $\frac{1}{156}$ b) $\frac{1}{36}$ c) 36 d) 576

7) If one angle of a triangle is acute, and a second angle of the triangle is obtuse, then the third angle of the triangle must be

a) acute b) obtuse c) right d) scalene

8) What time is exactly 1,440,000 minutes after 10 AM?

9) The sum of four consecutive even integers *cannot* be

a) 4 b) 12 c) 16 d) 20

10) If the product of all prime numbers between 1 and 210 is divided by 210, the remainder is

a) 0 b) 3 c) 7 d) 21

11) 3,024,000,000 = 3.024 x?

a) 10^6 b) 10^7 c) 10^8 d) 10^9

12) Adding -7 to a number is the same as subtracting what from the number?

a) 7 b) -7 c) $\frac{1}{7}$ d) $-\frac{1}{7}$

13) How many different positive integers are factors of both 2013 and 2014?

a) 1 b) 2 c) 3 d) 4

14) If the side length of square A is 6 and the area of square B is 4 times that of square A, what is the perimeter of square B?

15) At King's College, every student is required to either study science or social studies. If 80 students study science, 90 students study social studies, and 15 students study both, how many students attend King's College?