RAM WORKSHOP 6th Grade

Name _____

MATHLETE Challenge 3

www.RAMHouston.net

1. The sum 12 + 34 + 56 equals each of the following except _____.
A. 46 + 56 B. 12 + 90 C. 34 + 68 D. 46 + 68

2. Wednesday is five days after my party. On what day is my party?
A. Friday B. Sunday C. Monday D. Tuesday

3. (Six dozen) + (one dozen pairs) = __?__ sets of three
A. 48 B. 32 C. 24 D. 12

4. When Giggles the Clown correctly counts the dots on his costume in groups of 4, there are 3 left over. There could be __?__ dots all together.
A. 31 B. 32 C. 33 D. 34

5. In my garden, I have 6 roses for every 5 daisies, and those are the only flowers I have. If I have 66 flowers, how many of them are roses?
A. 11 B. 22 C. 30 D. 36

6. On a Sunday I put two rabbits in a cage. If the number of rabbits in the cage doubled every day, on what day did the cage first have more than 100 rabbits in it?
A. Thursday B. Friday C. Saturday D. Sunday

7. The sum of the remainders of 123 ÷ 4, 234 ÷ 5, and 345 ÷ 2 is _____.
A. 3 B. 6 C. 8 D. 12

8. On a number line, __?__ is the same distance from 1.75 as it is from 7.25.
A. 2.75 B. 3.25 C. 3.75 D. 4.5

9. $2^3 \times 3^4 \times 4^5 \times 6^7 \times 9^{10}$ = _____.
A. $2^{15} \times 3^{21}$ B. $2^{20} \times 3^{31}$ C. $2^{15} \times 3^{40}$ D. $2^{105} \times 3^{280}$

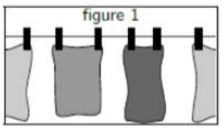
10. In a garage, the ratio of red cars to black cars is 8:5, and the ratio of black cars to white cars is 3:4. The minimum number of cars in the garage is _____.
A. 20 B. 59 C. 74 D. 91

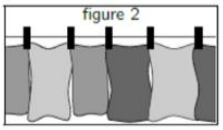
11. I wrote a list of consecutive positive integers beginning with 1. I then removed all multiples of 4, and I had 2345 integers left. What was the largest integer on my list after the numbers were removed?
A. 3126 B. 3127 C. 3129 D. 3130

12. At the start of my temporary job, I needed to load an average of 120 boxes a day in order to finish my job on time. At first I loaded 90 boxes a day. I then had 6 days left to load the remaining 1200 boxes. How many days did I have in all for this temporary job?
A. 10 B. 16 C. 22 D. 26

13. Each day last week I counted 50% more leaves than I had counted the day before. If I counted 2430 leaves last Friday, how many had I counted the Sunday before that Friday?
A. 160 B. 240 C. 280 D. 320

14. Emil started to hang up towels using two pegs for each towel as shown in figure 1. He realized that he would have not enough pegs and began to hang up the towels as shown in figure 2. Altogether, he hung up 35 towels and used 58 pegs. How many towels did Emil hang up in the way shown in figure 1?
A. 12 B. 13 C. 22 D. 23





15. Leon wants to write the numbers from 1 to 7 in the grid shown. Two consecutive numbers cannot be written in two neighboring cells. Neighboring cells are those that meet at the edge or at a corner. What numbers can he write in the cell marked with the question mark?
A. all of the odd numbers C. only the number 4
B. all of the even numbers D. only the numbers 1 or 7