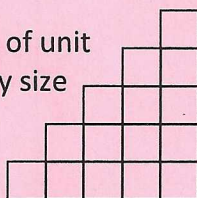


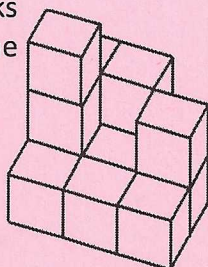
# 2013 Rocket City Junior Math Mania

## Individual Test – 4<sup>th</sup> Grade

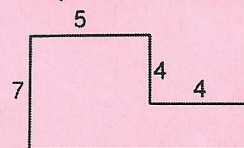
1. Evaluate:  $248 - 173$
2. A bag contains six red marbles and seven green marbles. If a marble is drawn randomly, what is the probability that it is green?
3. If today is Friday, what day of the week will it be forty-five days from today?
4. Evaluate:  $32.48 + 156.7$
5. Jan wins 15 coins. She puts two out of every three coins in her piggy bank. The other one she spends. How many (of the 15) coins will she put in her piggy bank?
6. Round the number 1234.5678 to the nearest hundred.
7. What is the average of 2, 3, 4, 7, and 9?
8. James has four boxes of crayons, each of which started with eight crayons in it. When he opened the first box, most of the crayons fell down a storm water grate, and only three crayons were left in the box. How many crayons does James have after this?
9. When a fair six-sided die is rolled, what is the probability of rolling a prime number?
10. What is the sum of seventeen and twenty-four?



11. In the figure to the right made up of unit squares, how many squares of any size appear?
12. Cindy wants to buy a book that costs eighteen dollars. If she has already earned seven dollars doing extra chores around the house, how many more dollars will she need to earn to get the book?
13. If a letter is selected from the word "MATHEMATICS". What is the probability of selecting a "T"?
14. What is the minimum number of blocks needed to make the stack shown to the right?



15. Evaluate:  $4^3$
16. Evaluate:  $1 + (12 - 4 \times 2)$
17. Using the numerals 3, 4, and 5 exactly once each, and the operations of addition, subtraction, multiplication and division (and parentheses) as much as you like, write an expression that evaluates to 60.
18. How many prime numbers are less than 25?
19. What is the greatest common factor of 54 and 84?
20. If Uma wants to get nine hours of sleep, and goes to bed at 9 PM, what time should she set her alarm for? Please include AM or PM in your answer.
21. Evaluate:  $22036 \div 7$
22.  $10 - 9 + 8 - 7 + 6 - 5 + 4 - 3 + 2 - 1 = ?$
23. My secret number is increased by 27, and the result is 66. What number is 5 more than my secret number?
24. Evaluate:  $6!$  (Note that  $6! = 6 \times 5 \times 4 \times 3 \times 2 \times 1$ .)
25. What is the perimeter of the shape below?



26. What is the 12<sup>th</sup> number in the sequence of numbers starting with: 1, 5, 9, 13, ... ?
  27. Evaluate:  $\frac{3}{7} \times \frac{5}{6}$
  28. If  $\text{☺} + 7 = 16$ , then what is the value of  $\text{☺} - 3$ ?
  29. What is the value of  $3\frac{3}{11} + 4\frac{7}{11}$ ?
  30. In a barn, there are some chickens (with 2 legs) and dogs (with 4 legs). If there are 10 animals and 24 legs, then how many chickens are there?
- TB1.** Start with 2. Keep multiplying by 2. Give the first answer that has 4 digits. The pattern is 2, 4, 8, ...
- TB2.** Write the name for a triangle that has no two sides of equal length. Spelling counts!
- TB3.** Eleven whole pieces of paper, and nine half pieces, equals 4 whole pieces and how many half pieces?