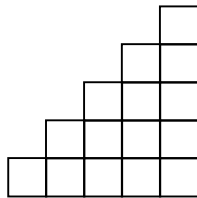


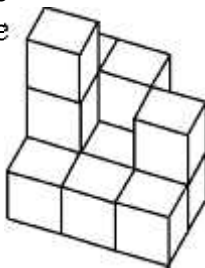
2013 Rocket City Junior Math Mania
Individual Test – 5th Grade

1. Evaluate: $248 - 173$
2. A bag contains six red marbles and nine green marbles. If a marble is drawn randomly, what is the probability that it is green?
3. Evaluate: $32.48 + 156.7$
4. Evaluate: $\frac{3}{4} \times \frac{5}{6}$
5. Round the number 1234.5678 to the nearest hundred.
6. What is the 11th term in the sequence: 3, 9, 15, 21, ...?
7. When my secret number is increased by thirteen and this result is then doubled, the final result is 78. What is my secret number?
8. What is the average of 6, 29, 6, 1, and 13?
9. 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 drain, and only three crayons were left in the box. How many crayons does James have after this?

10. What number is $\frac{2}{5}$ of 60?
11. If $4a + 5 = 37$, what is the value of a ?
12. What is the sum of seventeen and twenty-four?
13. The figure to the right is made up of unit squares, how many squares of any size appear?



14. Cindy wants to buy a math 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?
15. What is the minimum number of blocks needed to make the stack shown to the right?



16. $10 - 9 + 8 - 7 + 6 - 5 + 4 - 3 + 2 - 1 = ?$
17. When two fair coins are flipped, what is the probability that **at least** one is heads-up?
18. Evaluate: 4^4
19. Evaluate: $1 + (65 - 3^2 \times 4) \div 2$
20. Using the numerals 9, 8, and 6 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 12.
21. How many prime numbers are less than 35?
22. Evaluate: $8!$ (Note that $7! = 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$.)
23. What value(s) of z satisfy $7z - 32 = 101$?
24. If today is Friday, what day of the week will it be forty-five days from today?
25. 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.
26. Evaluate: $22032 \div 27$
27. Evaluate: $12^2 - 9^2$
28. What is the greatest common factor of 54 and 96?
29. If nine pounds of flour costs \$4.95, how many **cents** does one pound of flour cost?
30. In a barn, there are some chickens (with 2 legs) and dogs (with 4 legs). If there are 13 animals and 30 legs, then how many chickens are there?

TB1. Bill and Ted each roll a fair six-sided die. What is the probability that Bill rolls a higher number than Ted?

TB2. What is the smallest prime number greater than 200?

TB3. Toney has 35 cents in his pocket. How many different combinations of quarters, dimes, nickels, and pennies could he have to make 35 cents?