2012 Rocket City Junior Math Mania Individual Test – 4th Grade

1. Evaluate: 37 + 44



2. Does the angle to the right appear to be acute, right, obtuse or straight?

3. A circle has a radius of 14 cm. What is the diameter of the circle, in centimeters?

4. Evaluate: 7)259

5. 10 whole pizzas plus 11 half pizzas is the same as 13 whole pizzas and how many half pizzas?

6. Evaluate: $\frac{1}{4} + \frac{1}{6}$

7. If x + 9 = 22, then what is the value of x?

8. In how many different ways can you and two friends stand in line for a ride?

9. A secret number is multiplied by 4. Then 7 is added. The result is 23. What is the secret number?

10. What is the next term of the sequence 10, 14, 18, 22, __?

- 11. The area of a square is 64. What is the perimeter of the square?
- 12. A rectangular picture frame is 10 cm by 12 cm on the outside. The picture that fits inside is 8 cm by 10 cm. What is the area of just the picture frame?



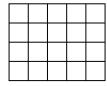
- 13. In a certain class, 7 students said they had only a Batman toy, 9 students said they had only a Spiderman toy, and 6 students said they had both. What is the total number of Batman and Spiderman toys owned by students in this classroom?
- 14. What is the sixth term of the geometric sequence with first term 5 and common ratio 2? The sequence begins 5, 10, 20, ...
- 15. If my piggy bank contains only dimes, nickels and pennies, and has nine coins worth a total of 48 cents, how many pennies are in the piggy bank?

16. How many minutes are in three-and-one-half hours?

17. What is the sum of the number of days in a week, the number of edges on a cube, and the number of seconds in a minute?

18. What is the mean (average) of the set {3, 11, 18, 8}?

19. How many squares of any size are in the array of unit squares to the right?



- 20. When Mr. McHugh's class lines up for recess, Katie stands immediately behind Mary, Gus is ahead of Catherine, and a Micah is behind Katie. If Katie is behind Catherine, write the name of the first person in line followed by the name of the last person in line.
- 21. Jim has 99 cents using only quarters, dimes, nickels, and pennies. What is the smallest number of coins he could have?
- 22. When a single card is drawn from a standard 52-card deck, what is the probability that it is a 6 of diamonds?
- 23. Round the number 1234.5 to the nearest ten.
- 24. How many of the numbers in the set {313, 231, 621, 794, 918, 114} are divisible by 3?
- 25. Fill in the blank with <, =, or >. 44.41 44.07
- 26. What is the sum of the first 10 positive odd numbers? {1, 3, 5, ...}
- 27. How many hours is it from 5:00 a.m. to 9:00 p.m.
- 28. When a six-sided die is rolled, what is the probability that the number on top is at least a 5?
- 29. A day of the week is chosen randomly. What is the probability that the name of the day of the week has 6 letters?
- 30. What is 131 times 22?