2023 Mission Math Utah Spring Competition (K-2)

You will have 40 minutes to complete as much of this test as you can. There are 30 free response questions total, and questions are arranged roughly from easiest to most difficult. Units are not needed. Write answers on the given line below each question. Calculators are not allowed. Do not begin the test until told to do so. Good Luck!

Full Name: _____

Grade: _____

Age: _____

1. What is the value of $1 + 2 + 3$?

   _____

2. Utah has 5 national parks and Nevada has 2 national parks. How many national parks do Nevada and Utah have together?

   _____

3. If Tom has 10 pumpkins and Louis has 230 pumpkins, how many pumpkins do they have altogether?

   _____

4. Dr. Jonas is writing a math test for his students. He has written 14 problems and wants 22 for his test. How many more problems does he need to write?

   _____

5. If Tony has 25 pomegranates, and Sophie has 32 pomegranates, how many pomegranates do they have together?

   _____

6. John draws 2 numbers from a box. If the sum of the two numbers is 5, and the first number is 3, what is the second number?

   _____

7. Dr. Jonas is writing a math test for his students. He has written 14 problems and wants 22 for his test. How many more problems does he need to write?

_____

8. Find the next number in the pattern: 1, 3, 5, __.

_____

9. Tom is looking for treasure chests. On his first day he finds 2 chests. On the second day he finds 3 chests. How many chests did he find in total?

_____

10. Alex had 6 coins. Yesterday, he gave 2 coins to his friend. Today, he gave 2 more coins to the same friend. How many coins does Alex have now?

_____

11. Sally has 8 stickers and she wants to give 2 stickers to each of her 3 friends. How many stickers will Sally have left for herself?

_____

12. What is the value of $5 \times 9 + 5 + 9$?

_____

13. If $x + 1 = 4$, what is the value of $3x + 3$?

_____

14. Jeffrey is making cupcakes. He uses 2 scoops of sugar for 30 cookies. How many scoops of sugar does he need for 90 cookies?

_____

15. Jake makes 60 dollars a month. How many dollars does he make in 3.5 months?

_____

16. Zach has a secret number. He multiplies the secret number by 2, adds 7 to the result, and then subtracts 8 from the result, ending up with 5. What is Zach's secret number?

_____

17. A square has side length 4. The perimeter of a square is the sum of all side lengths of the square. What is the perimeter of the square?

_____

18. When eating chocolates, Freddy can either eat 2 at a time, or 3 at a time. It takes him 3 seconds to eat either 2 or 3 chocolates at a time. If he has 12 chocolates, what is the difference between the longest and shortest times it would take Freddy to eat all the chocolates?

_____

19. Optimus Prime has decided to visit different planets in the galaxy. It takes him 3 days to fly from any planet to another, and he will stay on each planet for one day to enjoy the view. How many days will it take him to fly from Earth to 5 different planets and then back to earth? (Assume he does not spend a day to enjoy the view on Earth).

_____

20. Freddy the frog is jumping from lilly pad to lilly pad. He notices that some of the lilly pads have a flower on them, while others don't. If he jumped on 60 lilly pads on his journey and $\frac{3}{5}$ of them had flowers on them, how many lilly pads didn't have flowers on them?

_____

21. Compute $-3 \times (4 + 5) \times (6 - 8) + 12$.

_____

22. Find the value of $6 \times 4 \times 2 - 5 \times 3 \times 1$.

_____

23. Alex, Ben, and Charlie run in a race. Someone will win, someone else will get second, and the last one will get third. How many different ways can the race end?

_____

24. If 3 dings is equal to 4 dongs, How many dings are equivalent to 24 dongs?

_____

25. Jar Jar goes to the store and buys 10 pillows for $3.00 each and 12 blankets for $1.00 each. How much money does he spend in total?

_____

26. Rio the dog loves playing outside. If Rio plays outside for 30 minutes on weekdays and 60 minutes on weekends, how many minutes does Rio play outside in a week?

_____

27. Shrek and Donkey start 3 miles apart from each other and run toward each other starting at the same time. Shrek runs at 2 miles/hour and Donkey runs at 1 mile/hour. How many minutes will it take for Shrek and Donkey to meet?

_____

28. If $2A + 3B = 26$, and $3A + 2B = 24$ what is $A + B$?

_____

29. 13% of what number is 2.99?

_____

30. Jade drives down to St. George at 60 miles per hour and drives back at 84 miles per hour. Given that the distance to St. George is 840 miles, what is Jade's average speed, in miles per hour?

_____