Mission Math Utah Winter Competition (1-2)

You will have 40 minutes to complete as much of this test as you can. There are 20 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. If Luke has 5 apples and 2 oranges, how many fruits does he have total?

_____

2. Kiran had 22 pies, but then he got robbed. If Kiran now has 16 pies, how many pies were stolen?

_____

3. Sahil bought two ice cream cones. They cost him 40 cents in total. How many cents does 1 ice cream cone cost?

_____

4. James wants 30 pencils. If he has 21 pencils right now, how many more pencils does he need?

_____

5. How many sides do a triangle and a square have in total?

_____

6. At the local marketplace, an energy drink costs $1.50. Aidan walks into the store with $20.00, with hopes of buying as many drinks as possible. How many drinks can Aidan buy?

_____

7. Sally, Billy, and Bobby want an equal number of pieces of chocolate. If there are 12 total pieces of chocolate, how many pieces should each of them get?

_____

8. What are the chances of flipping a coin and getting heads? Express your answer as a percentage.

_____

9. What is the value of 1+3+5+7+9+11?

_____

10. John has 3 piles of sticks. The first pile has 3 sticks that are all 4 inches long. The second pile has 5 sticks that are each 1 inch long. The third pile has 4 sticks that are each 2 inches long. If John takes all his sticks and lays them out end-to-end, how many inches will the sticks be in total?

_____

11. Brendon drinks 2 shakes in 24 minutes. How long will it take him to drink 3 shakes?

_____

12. Skai wants to buy a present for his mom that costs $22. He gets paid $7 for every hour he works. To make enough money to buy the gift, how many whole hours does he need to work to have enough money for the present?

_____

13. This competition has 3 divisions. Each division's test has 20 problems. How many problems are used in this entire competition?

_____

14. If 140 marshmallows are given to 10 kids equally, how many marshmallows should each kid get?

_____

15. A farmer has a square field with a side length of 4. What length of fencing will he need to surround the entire field?

_____

16. Half a pound of candy costs $3.30. How much does a whole pound of candy cost?

_____

17. Mingchuan has $150 in cash. If he only has twenty dollar bills and five dollar bills and he has an equal number of each bill, how many total bills does he have?

_____

18. $Y + 2 = 5$ for some number Y. what is the value of $5 \times Y$?

_____

19. Joe plays golf every 3 days and Donald plays golf every 5 days. If they play on the same day today, in how many days will they play on the same day again?

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20. There are 24 permutations (different arrangements) of the letters in the word BLUE, such as UBLE or EBLU. For how many of them is the letter E not the last letter?

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