INSTπCRE
#GIRLSINMATH

Girls Math Competition
October 25, 2018
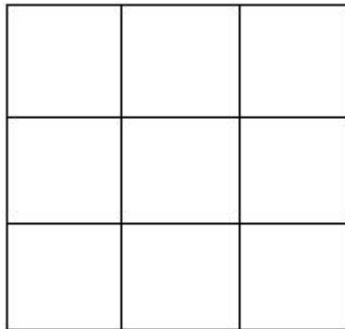**Orlando Math Circle**

OMC
orlando math circle

MATH IS MY SUPERPOWER

1. In a talent show, James went on stage at 7:00 pm. There were 4 participants before him, and each one took 20 minutes. The opening ceremony took 1 hour. What time did the talent show begin?

   A) 4:40 pm   B) 4:10 pm   C) 4:30 pm   D) 5:30 pm

2. How many squares are in this picture? (Hint: There may be squares of different sizes! !)

   A) 9   B) 10   C) 13   D) 14

3. A boy has as many sisters as brothers, but each sister has only half as many sisters as brothers. How many brothers and sisters are there in the family?

   A) 4 brothers and 3 sisters   C) 2 brothers and 2 sisters

   B) 6 brothers and 5 sisters   D) 3 brothers and 3 sisters

4. My father was 33 years old when I was 8 years old. Now, he is twice as old as I am. How old am I now?

   A) 16   B) 17   C) 25   D) 33

5. Booky the Bookworm visits his town's bookstore. He notices that a certain book costs $1 more than half of its price. How much does the book cost?
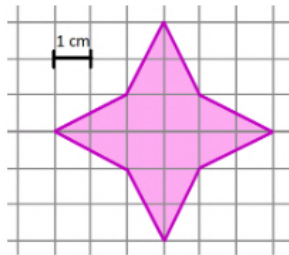

A) $1.50   B) $2.00   C) $2.25   D) $2.50

6. A restaurant is trying to rearrange the letters in the word FOOD so that they can make different 4 letter words (even silly words, such as ODOF count). How many different "words" can they make?

A) 4   B) 12   C) 16   D) 24

7. Find the area of the shaded portion on the grid below:
   A) 10 cm²   B) 12 cm²   C) 18 cm²   D) 20 cm²

8. Out of the shapes below, which one has as larger perimeter? (Hint: Perimeter is the length around the figure.)
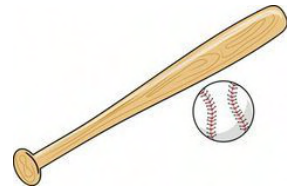

A) A   B) B   C) They are the same   D) Not even information to tell

9. Cathy flips two coins, each with a heads side and a tails side. What's the probability that both coins show the same side?

A) 1/3   B) 1/4   C) 1/2   D) 3/2

10. A bat and a ball cost $1.10 in total. The bat costs $1.00 more than the ball. How much does the ball cost?

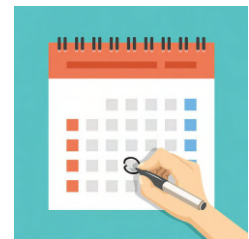   A) 5 ¢   B)10 ¢   C) 20 ¢   D) 100 ¢

11. What is the hundreds' digit of the <u>smallest</u> number using each of the digits 6, 7, 4, and 2 exactly once? (Source: Math Contests Volume 3)

   A) 2   B) 4   C) 6   D) 7

12. When a certain number is divided by 6, the answer is 80. When the same number is divided by 15, what is the answer? (Source: Math Contests Volume 3)

   A) 30   B) 32   C) 34   D) 35

13. The number of days in January minus the number of months in a year is: (Source: Math Contests Volume 3)

   A) 8   B) 18   C) 19   D) 28

14. John has 5 pennies, 3 dimes, and 2 quarters This has the same value as ___ nickels. (Source: Math Contests Volume 3)

   A) 9   B) 10   C) 16   D) 17

15. There are 6 players on a volleyball team. After winning their game, they all high five each other once to celebrate. How many total high fives took place?

   A) 5   B) 12   C) 15   D) 30

16. What is the next number in this ?

2, 3, 4, 6, 8, 12, __

   A) 12   B) 16   C) 18   D) 20

17. Subtracting 30 from 11x __ equals 102. What is the missing number? (Source: Math Contests Volume 6)

   A) 9   B) 10   C) 11   D) 12

18. In the figure below, the first row has 1 dot, the second has 3 dots, the third has 5 dots, and so on. More rows are added to the bottom, each with 2 more dots than the one above it. How many total dots will there in the first 8 rows combined?

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        ●
      ● ● ●
    ● ● ● ● ●
  ● ● ● ● ● ● ●
● ● ● ● ● ● ● ● ●
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   A) 8   B) 15   C) 32   D) 64

19. A pizza has 8 slices. At a pool party, there are 4 ⅜ pizzas. The children eat 2 ⅝ of them. How many SLICES are remaining?

   A) 1 1/4   B) 14   C) 2 1/4   D) 18

20. Out of the numbers 1 through 40, how many numbers have the digit 3 in them?

   A) 4   B) 10   C) 13   D) 14