

Name:

School Name:

1. What is the value of $12 + 11 - 10 - 9 + 8 + 7 - 6 - 5 + 4 + 3 - 2 - 1$?
A-) 12
B-) 10
C-) 8
D-) 6
2. Seven blue blocks and three red blocks are placed in a bag and selected at random. What is the probability of selecting a red block?
A-) $\frac{3}{7}$
B-) $\frac{7}{3}$
C-) 30%
D-) 70%
3. What is the sum of the 5th and the 9th smallest prime number? (Hint: A prime number is a whole number whose only factors are 1 and itself)
A-) 26
B-) 30
C-) 34
D-) 40
4. What is the next number in the sequence 1, 2, 5, 14, 41, ... ?
A-) 83
B-) 122
C-) 124
D-) 410
5. How many positive divisors does 210 have?
A-) 13
B-) 14
C-) 15
D-) 16

6. How many four-digit odd numbers can be formed using only the digits 0, 3, 2, 7, and 5 if digits may be repeated?

A-) 300

B-) 200

C-) 500

D-) 625

7. What is the value of $\frac{1}{2} \div \frac{1}{2} \div \frac{1}{2}$?

A-) $\frac{1}{4}$

B-) $\frac{1}{2}$

C-) 1

D-) 2

8. Simplify $(-11) + (-11) \div (-11) + (-11) - (-11)$

A-) -2

B-) 2

C-) -10

D-) 10

9. A church rings its bells every 15 minutes, the school rings its bells every 50 minutes, and the day care center rings its bells every 30 minutes. If they all ring their bells at noon on the same day, at what time will they next all ring their bells together?

A-) 1:35pm

B-) 2:30pm

C-) 5:00pm

D-) they will not ring together at all

10. Write the expression below in simplest form?

$$1 + \frac{1}{2 + \frac{1}{1 + \frac{1}{3}}}$$

A-) $\frac{7}{4}$

B-) $\frac{13}{3}$

C-) $\frac{15}{11}$

D-) $\frac{15}{4}$

11. The sum of the ages of **three** children is 37. The age of the oldest is twice the age of the youngest. The two older children differ by three years. What is the age of the youngest child?

A-) 8

B-) 9

C-) 10

D-) 11

12. What is the value of $\frac{3}{0.1} + \frac{2}{0.2} - \frac{1}{0.5}$?

A-) 18

B-) 28

C-) 38

D-) 48

13. Purple paint is made with a 6 : 3 : 1 ratio of white paint : blue paint : red paint . How much white paint is needed in order to make two gallons of purple paint?

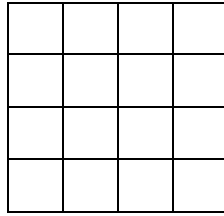
A-) 0.2 gallons

B-) 0.6 gallons

C-) 0.9 gallons

D-) 1.2 gallons

14. How many squares (of any size) are there in the figure below?



A-) 24

B-) 30

C-) 16

D-) 20

15. Suppose you average 82 on your first 4 tests in class. What must you score on the fifth test to raise your average to 85?

A-) 97

B-) 99

C-) 95

D-) 100

16. Arshia chooses a number. She multiplies it by 3, then adds 3, then divides by 3, and finally subtracts 6. Her end result is 4. What number did she choose?

A-) 6

B-) 9

C-) 12

D-) 15

17. Florida youth soccer league has 9 teams, and basketball league has 8 teams. Each season, each team plays every other team in their league exactly once. How many more games are played in the Soccer league than in the Basketball league in one season?

A-) 2

B-) 4

C-) 8

D-) 16

18. Today I am 4 years less than my sister's age. In 6 years, I will be 6 years more than one-third my sister's age. How old was my sister when I was born?

A-) 9

B-) 8

C-) 5

D-) 4

19. How many different arrangements of the letters in the word "ORLANDO" begin and end with an "O"?

A-) 120

B-) 60

C-) 30

D-) 15

20. The sequence below is formed by repeating the letters of the alphabet, in order, the same number of times as the letter's ordinal position in the alphabet. After 26 Z's, the sequence starts over with ABBCCC ... What is the 355th letter in the sequence?

ABBCCDDDEEEEEE ...

A-) Z

B-) B

C-) A

D-) C