

SOUTHEAST BULLOCH
1990 MATH TEAM TOURNAMENT
WRITTEN EXAM

1. Which is equal to 1990?

A. $\frac{1990}{1}$

B. $\frac{1990}{1990}$

C. 1991

D. $\frac{1}{1990}$

2. $8080 - 7979 =$

A. 111

B. 101

C. 1001

D. 1111

3. $4 + 3 \times (8 - 4) =$

A. 52

B. 28

C. 24

D. 16

4. $2\frac{2}{3} + \frac{2}{3} =$

A. 2

B. $3\frac{1}{3}$

C. $3\frac{1}{2}$

D. $3\frac{2}{3}$

5. $0.2 \times 0.2 =$

A. 4

B. $\frac{1}{4}$

C. 0.4

D. 0.04

6. $\frac{3}{14} \times \frac{7}{15} =$

A. $\frac{2}{5}$

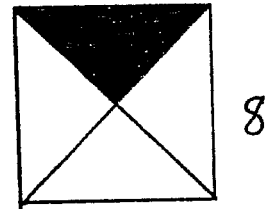
B. $\frac{1}{10}$

C. $\frac{5}{2}$

D. 10

7. Find the area of the shaded region of the square.

- A. 4
- B. 8
- C. 16
- D. 64



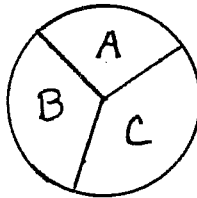
8. Region A is $\frac{1}{4}$ of the pie and Region B is $\frac{1}{3}$ of the pie. What part of the pie is Region C?

A. $\frac{1}{2}$

B. $\frac{5}{7}$

C. $\frac{11}{12}$

D. $\frac{5}{12}$



9. $\frac{0.1}{5} =$

A. $\frac{1}{50}$

B. $\frac{1}{5}$

C. $\frac{1}{2}$

D. 5

10. Half of the 24 people in a room leave. Then, half of those who left return. How many people are now in the room?

- A. 6
- B. 12
- C. 18
- D. 24

11. Round 0.999 to the nearest tenth.
- A. 0.1
 - B. 0.9
 - C. 0.99
 - D. 1.0
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12. In a school of 300 students, 27 were absent. What percent of the students were absent?
- A. 9%
 - B. 27%
 - C. 81%
 - D. 91%
13. When a pole 30-m tall casts a shadow 15-m long, what would be the length of the shadow cast by a 150-m pole?
- A. 3 m
 - B. 30 m
 - C. 75 m
 - D. 135 m
14. If $\square \times \square + \triangle = \triangle$, then $\square =$
- A. -1
 - B. 0
 - C. $\frac{1}{2}$
 - D. 1
15. In a right triangle, if one acute angle has a measure of 48° , the other has a measure of
- A. 42°
 - B. 52°
 - C. 90°
 - D. 132°
16. The intersection of the sets $\{1,3,5,7\}$ and $\{1,2,3\}$ is the set
- A. $\{1,2,3,5,7\}$
 - B. $\{1\}$
 - C. \emptyset
 - D. none of these
17. Add the number of months in a year, the number of weeks in a year, and the number of hours in a day. The sum is
- A. 79
 - B. 88
 - C. 401
 - D. 437

18. The width of a 2 lane street is about
- A. 80 m
 - B. 8 km
 - C. 8 m
 - D. 8 gm
19. If John spends \$5.42 on groceries and \$7.29 on hardware, how much change does John receive if he gives the cashier \$20.00?
- A. \$ 7.19
 - B. \$ 7.29
 - C. \$ 7.39
 - D. \$12.71
20. The reciprocal of $(\frac{1}{3} + \frac{1}{4})$ is
- A. 7
 - B. $\frac{7}{3}$
 - C. $\frac{4}{3}$
 - D. $\frac{12}{7}$
21. In which of the following arrangements are the numbers placed in increasing size order?
- A. $\frac{7}{11}$, $\frac{5}{8}$, $\frac{3}{5}$, $\frac{2}{3}$
 - B. $\frac{3}{5}$, $\frac{5}{8}$, $\frac{2}{3}$, $\frac{7}{11}$
 - C. $\frac{3}{5}$, $\frac{5}{8}$, $\frac{7}{11}$, $\frac{2}{3}$
 - D. $\frac{2}{3}$, $\frac{3}{5}$, $\frac{5}{8}$, $\frac{7}{11}$
22. $10 + (0 \times 10 \times 10 \times 10 \times 10) =$
- A. 0
 - B. 10
 - C. 10,010
 - D. 100,010
23. Which is the largest?
- A. 1983 x 1984
 - B. 1984 x 1985
 - C. 1985 x 1986
 - D. 1986 x 1987

24. $2 + 2 \times 2 - 2 =$

- A. 0
- B. 2
- C. 4
- D. 6

25. The measure of one angle of an isosceles triangle is 20° . The measure of another angle of this triangle is

- A. 20°
- B. 40°
- C. 60°
- D. 180°

26. The greatest common factor of 19 and 21 is

- A. 1
- B. 3
- C. 40
- D. 19×21

27. The smallest prime number between 20 and 30 is

- A. 21
- B. 22
- C. 23
- D. 24

28. John wants to run 3-km. How many laps must he run on a 300-m track?

- A. 900
- B. 300
- C. 30
- D. 10

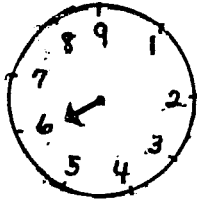
29. The cost of one liter of cola is half the cost of one liter of juice. If juice costs \$2 per liter, the total cost of one liter of cola and one liter of juice is

- A. \$2
- B. \$3
- C. \$4
- D. \$6

30. If the first and last digits of each of the following numbers are interchanged, which will produce the SMALLEST result?

- A. 8765
- B. 7685
- C. 6875
- D. 8675

31.



In the diagram at the left, the illustrated arrow moves clockwise to the next number every hour. If the arrow points to 6 right now, to which number will the arrow point in 24 hours?

- A. 2
- B. 3
- C. 6
- D. 9

32. Points A, B, and C lie on a straight line, and A is NOT between B and C. The distance from A to B is 15 cm. The distance from C to A is 8 cm. The distance from B to C is

- A. 23 cm
- B. 20 cm
- C. 10 cm
- D. 7 cm

33. Of the following, the one with the cheapest price per ounce is

- A. 12 oz for \$1.69
- B. 10.5 oz for \$1.45
- C. 14.5 oz for \$1.79
- D. 15 oz for \$1.98

34. The number of cars in a parking lot varies daily. For 10 days, the totals were as follows: 63, 72, 58, 69, 75, 80, 50, 74, 78, 60. What was the mean number of cars for those 10 days?

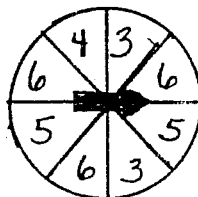
- A. 30
- B. 67.9
- C. 70.5
- D. 679

35. Find the missing number: $4000 \times 2000 = 2000 \times ?$

- A. 8000
- B. 6000
- C. 4000
- D. 1000

36. What is the probability that the pointer will stop on either 3 or 6?

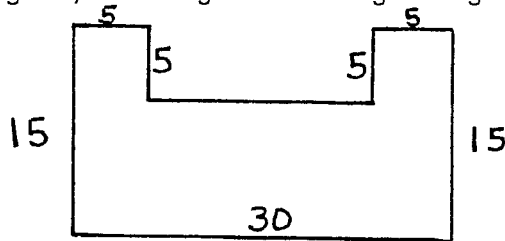
- A. $\frac{1}{4}$
- B. $\frac{3}{8}$
- C. $\frac{1}{2}$
- D. $\frac{5}{8}$



37. On a 12-day trip, I spent \$600. My average cost per day was

- A. \$720
- B. \$612
- C. \$ 50
- D. \$ 20

38. In the following figure, all angles are right angles. Find the area of this figure.



- A. 300
- B. 325
- C. 350
- D. 450

39. Five children divided some cake equally. Two of the children together got what percent of the cake?

- A. 5%
- B. 10%
- C. 20%
- D. 40%

40. When a certain number is divided by 7, the quotient is 4 and the remainder is 3. This certain number is

- A. 7
- B. 19
- C. 25
- D. 31

