

SEB MATH TEAM TOURNAMENT 1999

1. $\frac{1}{2} - 3.75$

$$3 \frac{1}{4} + \frac{13}{8}$$

- A. $-\frac{3}{2}$
- B. $-\frac{2}{3}$
- C. $-\frac{148}{195}$
- D. $-\frac{13}{18}$

2. In a group of 50 students, 28 are taking a math course, 36 are taking an English course, and 22 are taking both a math and an English course. How many of the 50 students are taking neither a math nor an English course.

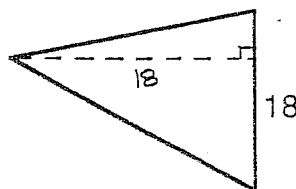
- A. 8
- B. 6
- C. 14
- D. 28

3. What is the probability that the sum of the numbers rolled on a pair of fair six-sided dice is a prime number?

- A. $\frac{1}{2}$
- B. $\frac{7}{18}$
- C. $\frac{7}{36}$
- D. $\frac{5}{12}$

4. Find the area of the triangle:

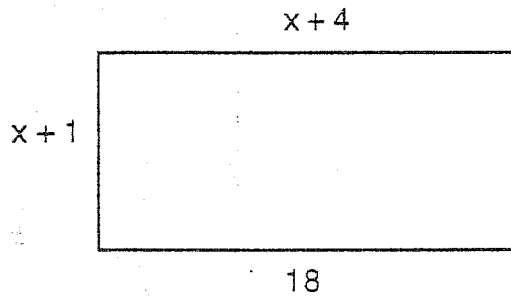
- A. 324
- B. 36
- C. 162
- D. 27



5. A 25 question mathematics test is scored by getting 5 points for each correct answer and losing 4 points for each wrong answer. A student loses 3 points if the answer is left blank. If a student scored a total of 63 points, how many answers were correct, wrong, blank.

- A. 18 correct, 3 wrong, 3 blank
- B. 18 correct, 2 wrong, 2 blank
- C. 17 correct, 4 wrong, 2 blank
- D. 17 correct, 2 wrong, 1 blank

6. What is the perimeter of the rectangle below?



- A. 50
- B. 36
- C. 32
- D. 66

7. $8 + 6 + 2 \times 3$

- A. 21
- B. 17
- C. 9
- D. 8

8. $4763 - 2.657$

- A. 2.106
- B. 44.973
- C. 4761.657
- D. 4760.343

9. If the 1st three terms in a sequence are 13, 18 and 23, find the sum of the first ten terms.

- A. 54
- B. 234
- C. 297
- D. 355

10. $3.76 \times (-4.2)$

- A. -.44
- B. -15.792
- C. 15.972
- D. 7.96

11. Convert $16 \frac{2}{3}\%$ to a decimal:

- A. $16\bar{6}$
- B. $16\bar{6}$
- C. $.001\bar{6}$
- D. $.1\bar{6}$

12. What percent of 16 is 24?

- A. $66 \frac{2}{3}\%$
- B. .66%
- C. 1.5%
- D. 150%

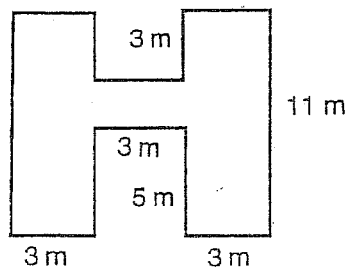
13. $3 \frac{2}{3} + 5 \frac{5}{6}$

- A. $8 \frac{1}{2}$
- B. $9 \frac{1}{2}$
- C. $8 \frac{7}{9}$
- D. $9 \frac{7}{9}$

14. $6 \frac{5}{8} - 3 \frac{3}{4}$

- A. $2 \frac{7}{8}$
- B. $3 \frac{2}{4}$
- C. $3 \frac{1}{8}$
- D. $2 \frac{1}{8}$

15. $-3 \frac{1}{2} \times 4 \frac{1}{3}$
- A. $-12 \frac{1}{6}$
B. $15 \frac{1}{6}$
C. $12 \frac{1}{2}$
D. $-15 \frac{1}{6}$
16. Find the height of a parallelogram with base 12 m and area 72m^2 .
- A. 432 m
B. 60 m
C. 48 m
D. 6 m
17. Convert $5 \frac{5}{6}$ to a decimal
- A. 5.56
B. 6.2
C. 5.65
D. 5.83
18. $-21.6 + 13.2$
- A. -34.8
B. 8.4
C. -8.4
D. 34.8
19. Round 269.996 to nearest hundredths:
- A. 300.00
B. 260.00
C. 270.00
D. 269.90
20. Find the perimeter of the figure below:



- A. 56 m
B. 38 m
C. 35 m
D. 70 m

21. What is the value of "x" in the equation: $\frac{2x+3}{5} = 7$

- A. 4.5
- B. 16
- C. 9
- D. 5

22. What is the median of 6, 14, 3, 17, 8, 9

- A. 3
- B. 8.5
- C. 10
- D. 17

23. Which of the statements are not true?

- A. $\frac{2}{3} = \frac{18}{27}$
- B. $-6 < -7$
- C. $.46 > .459$
- D. $\frac{4}{5} > \frac{6}{10}$

24. What is the Least Common Multiple of 3 and 20?

- A. 1
- B. 3
- C. 20
- D. 60

25. What is the Greatest Common Factor of 12 and 36?

- A. 12
- B. 3
- C. 2
- D. 36

26. If I have a bag containing 5 red marbles, 3 green marbles, and 4 blue marbles, what is the probability of not drawing a red?

- A. $\frac{5}{12}$
- B. $\frac{7}{12}$
- C. $\frac{5}{7}$
- D. $\frac{4}{9}$

27. What is the closest estimate of $46 \frac{2}{5} - 16 \frac{8}{9}$?

- A. 50
- B. 60
- C. 70
- D. 30

28.
$$\begin{array}{r} 3 \text{ gal. } 1 \text{ qt.} \\ - 1 \text{ gal. } 3 \text{ qt.} \\ \hline \end{array}$$

- A. 2 gal. 2 qt.
- B. 3 gal.
- C. 1 gal. 2 qt.
- D. 4 gal. 2 qt.

29. What is the mean of -6, 4, 5, 0, 6, -3, 8?

- A. 2
- B. 4.6
- C. -2
- D. 2.33...

30. I have an equal number of dimes and quarters in my purse. The total value of these coins is \$4.20. How many total coins do I have?

- A. 12
- B. 16
- C. 18
- D. 24

31. What is the smallest prime number?

- A. 0
- B. 1
- C. 2
- D. 3

32. What number gives you 200 when rounded to the nearest hundred?

- A. 149
- B. 251
- C. 151
- D. 99

33. What is the remainder when 5298 is divided by 21?

- A. 109
- B. 48
- C. 252
- D. 6

34. If it is 6:15 p.m. now, what time will it be in 25 hours, 30 minutes?

- A. 9:30 a.m.
- B. 9:30 p.m.
- C. 7:45 a.m.
- D. 7:45 p.m.

35. $(2 \times 2 \times 2) + (20 \times 20 \times 20) + (0 \times 200 \times 200)$

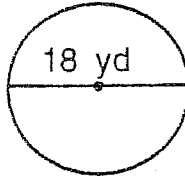
- A. 66
- B. 64,000
- C. 56,000
- D. 8008

36. On a fall afternoon, the thermometer shows 10°C . One winter morning, it shows -30°C . How much change has there been in the temperature?

- A. 20°C
- B. 40°C
- C. 3°C
- D. 30°C

37. What is the area of the circle?

- A. $18\pi \text{ yd}^2$
- B. $81\pi \text{ yd}^2$
- C. $36\pi \text{ yd}^2$
- D. $9\pi \text{ yd}^2$

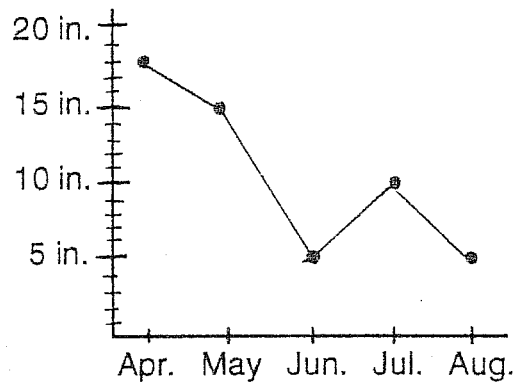


38. Heather was born in 1991. In what year will she be twice her age in 2010?

- A. 2011
- B. 2015
- C. 2020
- D. 2029

39. How much more did it rain in April than in July?

- A. 18 in.
- B. 10 in.
- C. 8 in.
- D. 28 in.



40. If you only miss 8 problems on this test, what percent will you have correct?

- A. 85%
- B. 95%
- C. 92%
- D. 80%

1999

Burger King and Southeast Bulloch
1999 Math Team 5th and 6th Grade Math Tournament
Individual Answers

- | | | | |
|-----|---|-----|---|
| 1. | B | 21. | B |
| 2. | A | 22. | B |
| 3. | D | 23. | B |
| 4. | C | 24. | D |
| 5. | C | 25. | A |
| 6. | D | 26. | B |
| 7. | B | 27. | D |
| 8. | D | 28. | C |
| 9. | D | 29. | A |
| 10. | B | 30. | D |
| 11. | D | 31. | C |
| 12. | D | 32. | C |
| 13. | B | 33. | D |
| 14. | A | 34. | D |
| 15. | D | 35. | D |
| 16. | D | 36. | B |
| 17. | D | 37. | B |
| 18. | C | 38. | D |
| 19. | C | 39. | C |
| 20. | A | 40. | D |

CIPHERING ANSWERS

- | | | | |
|----|------------|-----|------------|
| 1. | 76.25 | 9. | 83.75 |
| 2. | 184 | 10. | 124 |
| 3. | 30.96 | 11. | 110.08 |
| 4. | 1/8 | 12. | 1/27 |
| 5. | 52,319,074 | 13. | 34,728,895 |
| 6. | 9/32 | 14. | 14/45 |
| 7. | 35.60 | 15. | 13.79 |
| 8. | 7680 | 16. | 164 |