Cedar Ridge/Kiwanis Mathematics Tournament

February 19, 2000

Sixth Grade Exam

Directions

- No books, notes, calculators, or other aids are allowed in completing this exam.
- "Bubble" each answer neatly on the Scantron Form using a #2 pencil.
- If none of the choices listed (A, B, C, D) are correct, choose E ("none of these").
- The time limit will be one hour. You are expected to remain in the room the entire time.
- When time is called, give your Scantron Form to the supervisor before leaving.
- You may keep your copy of the exam.

1. What will be the date on the 189th day of the year 2000?

   A. July 6 B. July 7 C. July 8 D. July 13

2. A student had the following scores in math: 89, 97, 100, 85, 93, 73, and 100. What is the positive difference in the median and the mode?

   A. 2 B. 7 C. 15 D. 70

3. Samantha worked 8 hours on Saturday and earned $34. How much did she earn per hour?

   A. $4.50 B. $4.35 C. $4.20 D. $4.10

4. In order to make a B in math, Joey must have an 85 test average. His four test scores are 95, 70, 87, and 90. What will he have to make on his last test in order to get a B?

   A. 87 B. 79 C. 84 D. 83

5. The value of 0.9 + 1.6 + 0.007 + 8 is

   A. 1.696 B. 4 C. 9.507 D. 10.507

6. What is the base of a triangle with a height of 7 cm and an area of 28 cm^2?

   A. 2 cm B. 4 cm C. 8 cm D. 12 cm

7. What is the surface area of a rectangular box that is 3 inches wide, 5 inches long, and 7 inches tall?

   A. 142 in^2 B. 71 in^2 C. 105 in^2 D. 210 in^2

8. What is the digit in the hundred's place of the sum of 767,264 and 32,548?

   A. 6 B. 7 C. 8 D. 9

9. Solve: $(6\frac{1}{4} \times \frac{2}{3} \times 2\frac{1}{5}) \div \frac{5}{6}$

   A. $14\frac{11}{25}$ B. $12\frac{1}{25}$ C. 11 D. $7\frac{23}{26}$

10. Which of these numbers is not prime?

    A. 89 B. 97 C. 121 D. 137

11. What is 75.5 % of 60?

    A. 4.53 B. 31.02 C. 45.3 D. 64.8

12. Brandon took $60 with him to Atlanta. He spent $10 on lunch, $11 on souvenirs for his family, $15 at the arcade, and saved the rest for his trip home. What percent of the money did he spend?

A. .6 % B. 17% C. 40% D. 60%

13. Simplify: $3^3 + 2^2$

A. 31 B. 17 C. 13 D. 25

14. A regular octagon has a perimeter of 288 cm. What is the length of one side?

A. 32 cm B. 36 cm C. 48 cm D. 72 cm

15. Which of these cannot be the measures of the degrees of an isosceles triangle?

A. 15, 15, 160 B. 90, 45, 45 C. 30, 30, 120 D. 59, 59, 62

16. What is the product of all the positive odd number factors of 70?

A. 175 B. 245 C. 1225 D. 1960

17. What is the 10^{th} number in the following sequence?

0, 1, 3, 6, 10, ____, ____, ____, ____, ____

A. 36 B. 40 C. 45 D. 55

18. What is the area of a circle with circumference 37.68 ft? (Use $\pi = 3.14$)

A. 28.26 ft^2 B. 113.04 ft^2 C. 254.34 ft^2 D. 452.16 ft^2

19. If a + 6 = 11 and 7b = 49, what is the value of ab?

A. 35 B. 30 C. 42 D. 28

20. Jeremy bought 3 pounds of apples for $ 0.99 per pound and 2 pounds of pears for $ 0.88 per pound. What was the average cost per pound? (Round to the nearest cent)

A. $ 0.75 B. $ 0.39 C. $ 0.94 D. $ 0.74

21. What is the measure of the complement of a 30° angle?

A. 50° B. 60° C. 100° D. 120°

22. What is (+ 3.74) + (- 9.5)?

A. 13.24 B. –13.24 C. 5.76 D. –5.76

23. Salena's watch stopped at exactly 8:00. What is the measure of the larger angle formed by the hour and minute hands of her watch?

A. 240° B. 160° C. 120° D. 90°

24. What is the GCF of 36 and 48?

A. 2 B. 12 C. 144 D. 1726

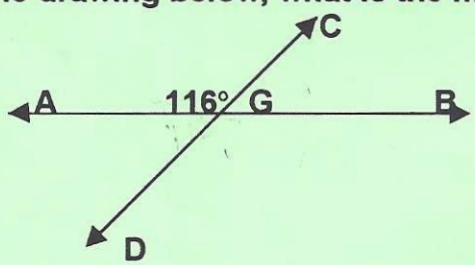
25. What is the area of a square with perimeter of 44 cm?

A. 16 cm^2 B. 44 cm^2 C. 121 cm^2 D. 165 cm^2

Tiebreaker Questions

TB1 The price of a $50 sweater was reduced by 30%. One week later this sale price was reduced by 10%. What was the final sale price?

TB2 In the drawing below, what is the measure of Angle CGB?



TB3 What is 35% of 60% of 180?