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Saturday, March 14th
March Mathness, 4th Grade
(Duration: 30 minutes)

Last Name: _____ First Name: _____

Grade: _____

Instructions:

1. DO NOT BEGIN UNTIL YOUR PROCTOR INSTRUCTS YOU TO DO SO.
2. This is a 25 question multiple choice test. Each question is followed by answers marked A, B, C, and D. Only one of these is correct.
3. A **tiebreaker** consisting of 5 additional questions will follow the test. These questions do not count toward your score. However, in the event of a tie, the competitor who answers more tiebreaker questions correctly will receive the higher ranking.
4. Circle your answer. Erase any stray marks and do not circle multiple answers to one question. Only answers properly marked on the test form will be graded.
5. There is **no penalty** for guessing. Your score on this test is the number of correct answers.
6. **No aids** are permitted other than scratch paper and erasers. No problems on the test will require the use of a calculator.
7. Before beginning the test, your proctor will ask you to record certain information on the answer form.
8. When your proctor gives the signal, begin working on the problems. You will have **30 minutes** to complete the test.
9. If you complete the problems before time is called, use the remaining time to check your answers.
10. Remember that this is designed to be different from math tests in school. A score of 50% on this test is considered excellent, so don't be discouraged if you don't know how to solve the problem.

1. A pet store has 6 tanks. Each tank has 5 goldfish. How many goldfish are there in all?



- (A) 11 (B) 25 (C) 30 (D) 35

2. A ribbon is 24 inches long. Emma cuts it into 3 equal pieces. How long is each piece in inches?



- (A) 6 (B) 8 (C) 10 (D) 12

3. What time is shown on the clock below?



- (A) 8:50 (B) 7:10 (C) 8:10 (D) 7:50

4. James has 17 popsicles. As he is walking on the beach, the following happen: 2 popsicles melt, James gives away 3, eats 5, and drops 2. How many popsicles does James have now?

- (A) 5 (B) 7 (C) 9 (D) 10

5. A bag has 24 candies. $\frac{1}{3}$ are grapes, $\frac{1}{4}$ are cherries, and the rest are lemons. How many lemon candies are there?

- (A) 7 (B) 10 (C) 12 (D) 16

6. While Austin was playing basketball, a portal suddenly appeared out of nowhere. As a result, a magician now stands before him. This magician takes Austin's single basketball and multiplies it by 2. The magician then takes Austin's balls again and multiplies them by 4. How many basketballs are there now?



- (A) 8 (B) 5 (C) 4 (D) 2

7. Target sells a notebook for \$3.75, a pen for \$1.60, and a folder for \$2.45. Paul needs two notebooks, three pens, and one folder. If Paul has one \$10 bill, one \$5 bill, four quarters, four dimes, and three pennies, how much change should he receive?

- (A) \$1.68 (B) \$1.72 (C) \$1.60 (D) \$1.76

8. Which of the following fractions is equal to 0.75?

- (A) $\frac{1}{2}$ (B) $\frac{2}{3}$ (C) $\frac{3}{4}$ (D) $\frac{4}{5}$

9. If a square has a side length of 7, what is its area?

- (A) 14 (B) 28 (C) 49 (D) 21

10. What is the value of $1 + 0.01 + 0.0001$?

- (A) 1.0011 (B) 1.0101 (C) 1.0001 (D) 1.0111

11. Two cereal companies are rivals. Company A sells its cereal for \$7.00 a box, and Company B sells its cereal for \$4.75 a box. By how many dollars does Company A need to lower its price to match Company B?



- (A) \$2.75 (B) \$3.00 (C) \$2.25 (D) \$1.90
12. Add the median and mode of the given data set. The values are already organized into numerical order. [2, 3, 3, 7, 11, 15, 15, 24, 29, 31]
- (A) 30 (B) 18 (C) 29 (D) 17
13. Carl decides to buy a shirt. He finds an orange shirt and one with blue stripes. The orange shirt costs \$20, and the striped shirt costs \$15. When he brings the shirts up to the cash register, the cashier tells him both of the shirts are on sale for 50% off. What is the total final price of the shirts, excluding sales tax?



- (A) \$20.00 (B) \$7.15 (C) \$20.26 (D) \$17.50
14. A blanket costs \$4 per square foot. If a blanket's dimensions are 2 feet by 5 feet, how much does the blanket cost?
- (A) \$28 (B) \$40 (C) \$14 (D) \$36

15. Mrs. Brown has a small classroom. The dimensions of her class are 4 ft x 4 ft. When Mrs. Brown asks the principal for a new classroom, he gives her a square classroom with an area of 81 ft^2 . What are the dimensions in feet of her new classroom?

(A) 27×3 (B) 9×9 (C) 6×6 (D) 10×8

16. You are running late and have to hurry. After brushing your teeth and washing your face, you realize that you only have half the time to do the rest of your morning routine. Here is your normal schedule:

6:00 AM - 6:15 AM: Brush teeth, wash face

6:15 AM - 6:30 AM: Eat breakfast

6:30 AM - 6:35 AM: Walk to bus stop

How many minutes does it take to get through the rest of your morning routine under these conditions?



(A) 8 (B) 14 (C) 17.5 (D) 10

17. Define \star as a new operation, where $a \star b = a \times b + a$. What is $4 \star 5$?

(A) 8 (B) 9 (C) 20 (D) 24

18. A number between 30 and 50 is divisible by 4 and by 6. What number is it?

(A) 36 (B) 40 (C) 44 (D) 48

19. A zoo has animals for a parade. There are twice the number of flamingos as zebras, 15 more penguins than flamingos, and the total number of animals in the parade is 120. How many zebras are in the parade?

(A) 15 (B) 18 (C) 21 (D) 24

20. A frog is hopping on lily pads. It hops 4 times. Each hop is 6 feet long. How many feet does the frog travel in total?



- (A) 10 (B) 24 (C) 20 (D) 18

21. You have 4 blue shirts, 3 red shirts, 3 yellow shirts, and 2 green shirts. If you pick a shirt at random, what is the probability you will get a red or yellow shirt?



- (A) $\frac{1}{2}$ (B) $\frac{1}{4}$ (C) $\frac{3}{5}$ (D) $\frac{1}{16}$

22. A train is traveling at a constant speed of 50 miles per hour. If it leaves Columbia at 3:32 PM on Tuesday, when will it reach Springfield, which is 175 miles away?



- (A) 7:02 AM on Tuesday (B) 7:02 PM on Thursday (C) 7:02 PM on Tuesday
 (D) 6:02 PM on Thursday

23. What is the sum of the first 50 odd numbers starting with 1?

- (A) 2,500 (B) 25,000 (C) 50,000 (D) 13,579

24. A book has 600 pages. Sam reads 25 pages everyday except Sunday. How many days will it take Sam to finish the book?



- (A) 27 (B) 28 (C) 4 (D) 5

25. A square floor measures 7 feet by 7 feet. Tiles measuring 1 foot by 1 foot are sold in boxes of 11. What is the minimum number of boxes needed to cover the floor?

- (A) 85 (B) 5 (C) 68 (D) 4

TIEBREAKER: These questions do not count toward your score. However, in the event of a tie, the competitor who answers more tiebreaker questions correctly will receive the higher ranking.

1. Starting at 2:00 p.m., a bowling ball was rolled in each of two lanes. One lane rolled a ball every 12 seconds. The other lane rolled a ball every 20 seconds. By 2:36 p.m., how many times were the balls rolled at the same time in both lanes?
(A) 32 (B) 40 (C) 34 (D) 37
2. The Rock Bridge football team scored an average of 32 points per game in its first four games. After the fifth game, their average dropped to 31 points. How many points did the team score in its fifth game?
(A) 34 (B) 27 (C) 26 (D) 32
3. What is the ones digit of $9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8 \times 9$?
(A) 4 (B) 6 (C) 7 (D) 0
4. The superhero, the Flash, has a speed of 12,000 miles per hour. If he doubled his speed, what would his new speed be?
(A) 400 m/min 500 m/min (C) 350 m/min (D) 600 m/min
5. Mr. McCray has a garden with an area of 192 square centimeters. The length of the garden is three times as long as the width. Given this information, find the perimeter of the garden.
(A) 52 cm (B) 56 cm (C) 64 cm (D) 72 cm