

Let's thank our sponsors!



Proudly Sponsored By

















5th Grade Test Saturday, April 19th April Arithmetic

(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. There are 5 additional tiebreaker questions at the end of the test. These will not be included in your final score, but if you and another competitor receive the same score on the test, whoever correctly answers more tiebreaker questions will be ranked higher.
- 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. If you complete the problems before time is called, use the remaining time to check your answers.
- 9. Remember that this is designed to be different from math tests in school. A 50% on this test is considered excellent, so don't be discouraged if you don't know how to solve the problem.

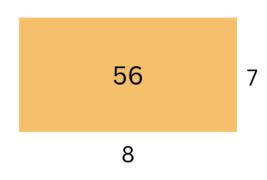
1. Eric is watching the Lakers vs. Mavericks game. The game is currently tied at 54 points for each team. Then, suddenly, a Lakers player scored a layup and two 3-pointers. One layup is worth two points and one 3-pointer is worth three points. How many points do the Lakers have now?



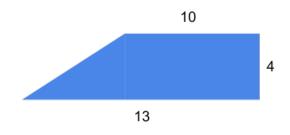
- **(A)** 62
- **(B)** 57
- **(C)** 58
- **(D)** 60
- 2. Which of the following numbers is not divisible by 7?
 - **(A)** 49
- **(B)** 14
- **(C)** 28
- **(D)** 41
- 3. What is the Greatest Common Factor of 36 and 48?
 - **(A)** 6
- **(B)** 8
- **(C)** 12
- **(D)** 18
- 4. Which sequence has exactly 3 prime numbers?
 - **(A)** 1, 2, 3, 4, 6, 8
- **(B)** 2, 4, 6, 8, 10, 13
- **(C)** 2, 3, 7, 9, 10, 15
- **(D)** 1, 3, 5, 7, 9, 11
- 5. Ella wants to evenly split the \$76 she got for her birthday between her 4 friends. How much money does each friend get?



- **(A)** \$15
- **(B)** \$20
- **(C)** \$38
- **(D)** \$19
- 6. The rectangle below has an area of 56 units². How many units would need to be subtracted from each 8-length side to make the area 21 units²?

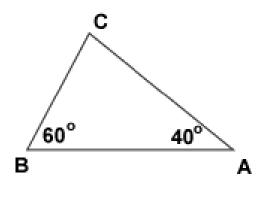


- **(A)** 5
- **(B)** 31
- **(C)** 10
- **(D)** 6
- 7. Find the area of the figure below.



- **(A)** 32 units²
- **(B)** 46 units²
- **(C)** 40 units²
- **(D)** 52 units²
- 8. What is the median of the following set of numbers: 18, 12, 25, 22, 40, 35, 30?
 - **(A)** 22
- **(B)** 25
- **(C)** 30
- **(D)** 35
- 9. In the equation $5 + 2(3 + 2)^2$, which operation would you do first?
 - **(A)** 5 + 2
- **(B)** $(3+2)^2$
- **(C)** 3 + 2
- **(D)** 2(3+2)
- 10. A square has a perimeter of 48 cm. What is its area?
 - **(A)** 96 cm^2
- **(B)** 144 cm^2
- (C) 256 cm^2
- **(D)** 576 cm^2

11. If one angle of a triangle is 40° and another is 60°, what is the measure of the third angle?



- **(A)** 90°
- **(B)** 80°
- **(C)** 100°
- **(D)** 120°

12. Jaydeep has 1,000,000 aura points; Gavin has 1,000,000,000 aura points. If Jaydeep loses 50% of his aura points and Gavin gains 50% more, how many aura points do they have together after the aura-off?



- **(A)** 1, 500, 500
- **(B)** 1, 500, 500, 000
- **(C)** 2,000,000,000
- **(D)** 1, 500, 000, 000
- 13. John owns a window cleaning company. He charges \$10 per window and a \$50 service fee. Jackson's house has 25 windows. Choose the calculation that would allow Jackson to find how much dollars it would cost him to have all the windows in his house cleaned.



(A)
$$10 \times (50 + 25)$$

(B)
$$25 \times 10 + 50$$

(C)
$$50 \times 10 + 25$$

(D)
$$25 \times (10 + 50)$$

14. A recipe calls for $3\frac{1}{2}$ cups of flour to make 14 muffins. How many cups of flour are needed to make 28 muffins?



- **(A)** 5
- **(B)** 6
- **(C)** 7
- **(D)** 8

15. If 6 rocks equal 12 racks, and 4 racks equal 8 roads, how many rocks equal 16 roads?



- **(A)** 8
- **(B)** 4
- **(C)** 6
- **(D)** 10

16. 100 grams of peanuts cost 60 cents. What is the cost of 350 grams of peanuts?



- (A) 210 cents
- **(B)** 240 cents
- **(C)** 140 cents
- **(D)** 205 cents

- 17. Solve $4^3 + (8^2 + 26)$.
 - **(A)** 102
- **(B)** 207
- **(C)** 154
- **(D)** 54
- 18. Samantha has 12 bags of apples with 5 apples in each. She takes 75% away. How many apples are left in bags?

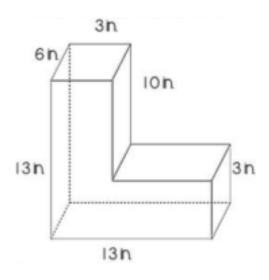


- **(A)** 15
- **(B)** 45
- **(C)** 35
- **(D)** 25
- 19. The ratio of red to blue marbles is 3:5. If there are 24 red marbles, how many blue marbles are there?



- **(A)** 40
- **(B)** 30
- **(C)** 48
- **(D)** 50
- 20. The sum of three consecutive odd numbers is 75. What is the smallest of these numbers?
 - **(A)** 23
- **(B)** 25
- **(C)** 27
- **(D)** 29
- 21. Solve for x given that -3x + 5 > 20.
 - **(A)** x > 5
- **(B)** x < 5
- **(C)** x > -5 **(D)** x < -5

22. Find the total volume of the figure below.



- **(A)** 424 in^3
- **(B)** 392 in^3
- (C) 414 in^3
- **(D)** 217 in^3

23. Charlie's car drives at a speed of 60 miles per hour. If his home is 3 hours away, how many miles does he drive to get back home?



- **(A)** 60
- **(B)** 240
- **(C)** 180
- **(D)** 120

24. Samuel needs to rebuild his broken fence as quickly as possible. If 6 workers can build the fence in 25 minutes, how many minutes would it take 10 workers to build the same fence?



- **(A)** 10
- **(B)** 15
- **(C)** 20
- **(D)** 25

25. Joe is on one side of town and Cookie is on the other side. Joe is driving at a speed of 0.5 miles per minute towards Cookie's house, who lives 10 miles away. However, there is a traffic jam that lasts 10 minutes on the way to Cookie's house, and Joe doesn't move at all during those 10 minutes. How much time will it take for Joe to get to Cookie's house?



- (A) 20 minutes
- **(B)** 25 minutes
- (C) 30 minutes
- (D) 35 minutes

TIEBREAKER: If you and another competitor receive the same score on the test, whoever correctly answers more tiebreaker questions (the questions below) will be ranked higher.

1. What is $2 + 4 + 6 + \cdots + 38 + 40$?

(A) 420

(B) 450

(C) 820

(D) 850

2. How many rectangles are in the grid below?



(A) 14

(B) 30

(C) 36

(D) 45

3. Anna, Belle, Clara, and Clara's dog are lining up for a photo. How many ways can they arrange themselves if Clara wants to be next to her dog?

(A) 6

(B) 12

(C) 36

(D) 48

4. In a certain city, there is a $\frac{1}{2}$ chance of rain on weekends and a $\frac{1}{10}$ chance of rain on weekdays. Bob wakes up and does not know what day of the week it is. What is the probability that he will see rain when he goes outside?

(A) $\frac{3}{14}$ **(B)** $\frac{3}{5}$ **(C)** $\frac{1}{20}$ **(D)** $\frac{1}{12}$

5. A 500-meter-long train travels at a constant speed of 25 meters per second. How many seconds does it take for the train to completely pass through a 300-meter-long tunnel?

(A) 12

(B) 20

(C) 32

(D) 46