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Saturday, March 25th March Mathness
(Duration: 25 minutes)

Last Name: $\qquad$ First Name: $\qquad$

Grade: $\qquad$

## 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. 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.
4. There is no penalty for guessing. Your score on this test is the number of correct answers.
5. No aids are permitted other than scratch paper and erasers. No problems on the test will require the use of a calculator.
6. Before beginning the test, your proctor will ask you to record certain information on the answer form.
7. If you complete the problems before time is called, use the remaining time to check your answers.
8. 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.
9. Compute: $165 / 15$.
(A) 13
(B) 7.5
(C) 92
(D) 11
10. $8 \cdot 4.5=$ $\qquad$ $-1$
(A) 40
(B) 16
(C) 37
(D) 35
11. What is $\frac{7}{10}+\frac{3}{5}$ ?
(A) $\frac{21}{15}$
(B) $\frac{13}{10}$
(C) 1
(D) $\frac{10}{5}$
12. Andrea had five squishmallows, and she got three more for her birthday. Her friend Lucy had two squishmallows, and she got four more for her birthday. Their other friend Alma had six squishmallows, but her birthday hasn't passed yet. They get together for a party and bring all of their squishmallows. How many squishmallows are at the party?

(A) 18
(B) 19
(C) 20
(D) 21
13. A triangle has an area of $50 \mathrm{ft}^{2}$ and a height of 4 ft . How long is its base?
(A) 5 ft .
(B) 15 ft .
(C) 25 ft .
(D) 35 ft .
14. Maria wants to bake 2 cakes for her friend's birthday party, but the recipe she has provides the recipe for 1 cake. If the recipe only calls for $1 / 4$ cup of chocolate, how much does she need to make 2 cakes?

(A) $\frac{1}{3}$ cup
(B) $\frac{1}{4}$ cup
(C) $\frac{1}{2}$ cup
(D) 1 cup
15. Bob has three different colored candies. How many orders are there in which he can eat the three candies?
(A) 3
(B) 2
(C) 6
(D) 9
16. What is 46.127543299 when rounded to the tenth place?
(A) 46.12
(B) 46.127
(C) 46.1
(D) 46
17. Compute: $\frac{2 \cdot 3 \cdot 5 \cdot 7 \cdot 9 \cdot 12}{3 \cdot 4 \cdot 5 \cdot 6 \cdot 9}$.
(A) 2
(B) 9
(C) 7
(D) 12
18. In the summer, Lena sells lemonade with her best friend Bailey and her older brother Nick. Lena and Nick each sell five cups of lemonade, and Bailey sells six cups. On the way home, Lena sells another three cups of lemonade to her neighbor. If each cup of lemonade costs 4 dollars, how much money have they made?

(A) $\$ 23.00$
(B) $\$ 45.50$
(C) $\$ 79.00$
(D) $\$ 76.00$
19. Quin is doing his math homework at 2 pm Wednesday afternoon. If it takes Quin 3 hours to complete his math homework and he only does one hour on Wednesday afternoon and chooses to complete the rest of it starting the next day 1 hour later than the time he started on Wednesday, what time and day will Quin be done with all of his math homework?

(A) Thursday at 6 p.m.
(B) Friday at 5 p.m.
(C) Thursday at 4 p.m.
(D) Thursday at 5 p.m.
20. If $a @ b=\frac{a \cdot b}{2}$, what is $(2 @ 8)-7$ ?
(A) 1
(B) 2
(C) 3
(D) 4
21. Nadia's apartment building has 14 identical stories. If the building is 140 feet tall, how high is the ceiling of her apartment if she lives on the 12th floor?
(A) 14 ft . high
(B) 10 ft. high
(C) 7 ft . high
(D) 11 ft . high
22. What is $3.70983+2.55817$ rounded to the nearest hundredth?
(A) 6.27
(B) 6.31
(C) 7.53
(D) 5.89
23. What is the product of the sum of 13 and 21 and the sum of 5 and 9 ?
(A) 476
(B) 62
(C) 3822
(D) 170
24. James ends the year with 4096 blooms on his plant that he got as a seed at the beginning of the year. If we know that each month the number of blooms on the plant doubled, how many blooms did James start out with?
(A) 1 bloom
(B) 3 blooms
(C) 16 blooms
(D) 2 blooms
25. Tara has a guitar recital today that can be a max of 40 minutes long. If Tara wants to use all 40 minutes and her first two pieces are 10 minutes long each, how long should the next 3 pieces be, if they all need to be the same length?

(A) 6.67 minutes
(B) 5 minutes
(C) 10 minutes
(D) 7 minutes
26. If Theo fixes 2 spelling errors per 5 minutes in his essay and Chloe puts 5 spelling errors in per 12 minutes (just to mess with him), how many spelling errors will there be after an hour?
(A) 3 spelling errors
(B) 1 spelling errors
(C) 12 spelling errors
(D) None; Theo fixed them all.
27. Compute: $1+3+5+\cdots+25$.
(A) 121
(B) 144
(C) 169
(D) 196
28. Thing 1 and Thing 2 are traveling to the St. Louis Aquarium, planning to catch a 3:00 p.m. show on penguins. Thing 1 is 30 miles away from the aquarium and leaves for it at 2:00 p.m., traveling at a constant rate of 40 miles per hour. Thing 2 lives 10 miles away from the aquarium and drives at a constant 30 miles per hour starting at 2:30 p.m. to reach the aquarium, but he stops at Dairy Queen on the way for 20 minutes. Who will reach the aquarium on time for the showing?

(A) Thing 1
(B) Thing 2
(C) Thing 1 and Thing 2
(D) Neither
29. Nate and Sarah are racing each other. Sarah can run $\frac{3}{4}$ ths of the distance Nate can run in one minute. They begin racing at the same time from the same location. If Nate is
running at a speed of 200 feet per minute, how much farther will Nate have ran than Sarah after two minutes?
(A) 50 ft .
(B) 200 ft .
(C) 75 ft .
(D) 100 ft .
30. Mindy has four flower pots arranged in a line on her windowsill. She wants to grow a different plant in each pot: one marigold, one rose, one chrysanthemum, and one hibiscus. How many ways can she arrange the plants?

(A) 12 ways
(B) 24 ways
(C) 36 ways
(D) 48 ways
31. Billy is teaching his cat how to read. He teaches her 2 two letter words on Monday, 3 three letter words on Tuesday, 5 four letter words on Wednesday, and on, teaching her the next prime number of words each subsequent day, each having one more letter each than the words learned the previous day. How many letters in total are in the words she learns the next Tuesday?
(A) 171 letters
(B) 230 letters
(C) 253 letters
(D) 264 letters
32. How many triangles are in this picture?

(A) 24
(B) 1
(C) 4
(D) 18
33. Fernando and Garrison are running a 60 meter relay race. Fernando begins the race at the starting line and stops 30 meters in. Garrison immediately picks up from where Fernando stops and finishes the remaining 30 meters of the race. If Fernando runs 2 meters per second and Garrison runs 1 meter per second, ow long will it take for them
to finish the race?

(A) 60 seconds
(B) 45 seconds
(C) 30 seconds
(D) 15 seconds
