

Division N

| | Answers | Score |
|---|---------|-------|
| 1. What is the value of $5 + 8 \times 3 + 1 + \sqrt{9}$ | | |
| 2. What is the area of a circle with diameter 10? Express our answer in term of π . | | |
| 3. Find the missing factor: $20 \times 30 \times 40 = 2 \times 4 \times 6 \times \underline{\hspace{1cm}}$ | | |
| 4. What fraction of an hour passed today between 11:09 am and 11:41 am? | | |
| 5. Adrian is traveling on I-405 at a rate of 55 miles per hour. At this rate, how many hours will it take for Adrian to travel 330 miles? | | |
| 6. What is the next number in the following series? 3, 9, 21, 45, $\underline{\hspace{1cm}}$ | | |
| 7. What is the probability to draw a 2 of hearts or an ace from a standard deck of cards? | | |
| 8. How many perfect squares are between 20 and 145? | | |
| 9. Evaluate: $\frac{2}{3} \times \frac{4}{5} \times \frac{6}{7} \times \frac{7}{6} \times \frac{5}{4} \times \frac{2}{3}$ | | |
| 10. Find the smallest of five consecutive numbers whose sum is 100. | | |
| 11. If 3 of every 150 elementary students play chess, then $\underline{\hspace{1cm}}$ % of all elementary students play chess. | | |
| 12. What is the largest odd factor of 81? | | |
| 13. Evaluate: $\left(\frac{3}{5}\right)^3$ | | |

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| 14. What is the average of all the odd numbers between 2 and 10? | | |
| 15. For each dollar Brandt earns, he puts a quarter and a penny in the bank. If he has earned \$83, how much money, in dollars, has he put in the bank? | | |
| 16. Twice my favorite number is one-hundred-two less than five times my favorite number. What is my favorite number? | | |
| 17. What is the mean of $\frac{2}{3}$ and $\frac{4}{9}$? | | |
| 18. Evaluate: $(11 + 22 + 33) \div (1 + 2 + 3)$ | | |
| 19. Evaluate: $3\frac{3}{11} \times 7\frac{1}{3}$ | | |
| 20. 40 yards of fabric was used to make 6 Halloween capes. How many yards are used to make 1 cape? | | |
| 21. 5.5 gallons of orange juice was poured equally into 80 cups. Find the volume in ounces of orange juice in each cup. 1 gallon = 128 oz | | |
| 22. Find the probability of rolling a sum of 1 or a sum of 13 with two standard dice (numbered 1 – 6). | | |
| 23. Find the least common multiple of 6, 7, and 8. | | |
| 24. What is the sum of 60% of 75 and 75% of 60? | | |

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| 25. | Bharat saved \$280. Koa saved \$120 more than Bharat. What percentage of Koa's money must be given to Bharat so each of them has the same amount of money? | | |
| 26. | The ratio of red cars to black cars to white cars on a car lot was 8 : 6 : 12. If there were 182 cars altogether, how many black cars were there? | | |
| 27. | Adding 38 to a number increases it by 5% of its original value. What is the original number? | | |
| 28. | It takes 3 teacher 3 hours to write 36 test problems. Assuming the 3 teachers work at the same average rate, what is the number of minutes it would take for 1 teacher to write 6 test problems? | | |
| 29. | Ben drives from Alpvile to Bizzburg at 70 miles per hour, then drives back along the same route at 20 miles per hour. As a mixed number, what was his average speed, in miles per hour? | | |
| 30. | What is the product of 0.5% of 500 and 5% of 50? | | |
| 31. | Evaluate: $-3 - 12(-5 + 3)$ | | |
| 32. | What is the midway between $2\frac{1}{2}$ and $-1\frac{1}{2}$. | | |
| 33. | Manasvi's guestroom is 15 ft long and 12 ft wide. How long is the diagonal of the guestroom? Express your answer in decimal rounded to the nearest hundredth. | | |
| 34. | Evaluate: $(3x \cdot 2x)^2$ | | |
| TOTAL SCORE | | | |

MATH CHALLENGE TOURNAMENT 2015 GRADE 6

Sprint Math

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FINAL SCORE:

Name: _____

Team#: _____

- Write your answers in this test booklet.
- Unit is not necessary. If you choose to label your answer, please make sure you write the correct unit. A correct answer with incorrect unit will be marked as an incorrect answer.

Correct answer: 1 point

Blank answer: 0 point

Incorrect answer: 0 point.