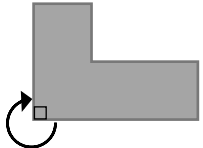


1. Of the following, which has the greatest value? A. $12 \times 3$ B. $6 \times 6$ C. $4 \times 11$ D. $5 \times 8$ E. $2 \times 21$
2. Which number has the same value with 210 hundreds? A. 210,000    B. 201,000    C. 210,100    D. 21,000    E. 21,100
3. Between which two numbers is the quotient of $87 \div 5$ ? A. 5 and 10    B. 6 and 12    C. 8 and 13    D. 12 and 15    E. 15 and 20
4. Two hundred three thousand, one hundred ten people watched the fireworks display in town. What is that number written in standard form? A. 200,010    B. 203,101    C. 203,110    D. 230,010    E. 2,030,110
5. What time will it be 90 minutes after 10:45 a.m.? A. 12:25 p.m.    B. 9:15 p.m.    C. 12:15 p.m.    D. 12:15 a.m.    E. 9:15 a.m.
6. Fill in the blank to make a true sentence: 12 less than 40 equals 15 more than _____. A. 28    B. 33    C. 23    D. 13    E. 3
7. A shape has 4 equal sides but no right angles. This shape is a _____. A. Square    B. Rectangle    C. Rhombus    D. Trapezoid    E. None of these
8. If tomorrow is Friday, 5 days ago was _____. A. Saturday    B. Sunday    C. Monday    D. Tuesday    E. Friday
9. 10 of 16 balloons at Jack's party are filled with helium. In simplest form, what fraction of the balloons are filled with helium? A. $\frac{1}{6}$ B. $\frac{5}{11}$ C. $\frac{10}{16}$ D. $\frac{5}{16}$ E. $\frac{5}{8}$
10. How many $\frac{1}{5}$ -gallons are in 5 gallons? A. 1    B. 5    C. 10    D. 25    E. 50
11. Which set of fractions below are ordered from least to greatest? A. $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$ B. $\frac{1}{8}, \frac{2}{3}, \frac{3}{5}$ C. $\frac{1}{2}, \frac{2}{3}, \frac{2}{9}$ D. $\frac{1}{7}, \frac{2}{5}, \frac{3}{4}$ E. $\frac{2}{5}, \frac{3}{5}, \frac{4}{7}$
12. Find the sum of the next two numbers in the pattern below: 2, 2, 3, 4, 4, 6, 8, 8, 12, ____, ____. A. 48    B. 40    C. 32    D. 24    E. 16
13. Express $3\frac{1}{3}$ hours in minutes. A. 190 min    B. 200 min    C. 220 min    D. 230 min    E. 330 min
14. What value can correctly replace the question mark? $10 \div 6 = \frac{?}{3}$ A. 5    B. 6    C. 7    D. 8    E. 10

15. Find the value of $2 \times 3 \div 2 \times 3$ A. 1    B. 4    C. 6    D. 9    E. 10
16. Jumping for 15 minutes burns 75 calories. How many calories will Kelly burn, if she jumps for 45 minutes? A. 100    B. 205    C. 215    D. 225    E. 250
17. What is the perimeter of a regular decagon with the side length of 7? A. 49    B. 54    C. 70    D. 77    E. 84
18. What is the sum of $\frac{2}{100} + \frac{1}{10}$ ? A. $\frac{21}{100}$ B. $\frac{21}{10}$ C. $\frac{12}{100}$ D. $\frac{12}{10}$ E. $\frac{102}{100}$
19. Which fraction is equivalent to 0.02? A. $\frac{20}{100}$ B. $\frac{1}{50}$ C. $\frac{2}{10}$ D. $\frac{1}{200}$ E. $\frac{2}{200}$
20. Of the following numbers, which is closest to 10? A. 9.19    B. 9.9    C. 9.91    D. 10.01    E. 10.1
21. If it will be 10 a.m. in 10 hours, then it was 10 p.m. _____ hours ago. A. 11    B. 10    C. 4    D. 3    E. 2
22. Of the following, which is not equal to 1? A. $\frac{1}{10}$ of 10    B. $\frac{1}{100}$ of 100    C. $\frac{1}{50}$ of 50    D. $\frac{1}{5}$ of 50    E. $\frac{1}{20}$ of 20
23. Which set of numbers contains only prime numbers? A. 1, 3, 5, 19    B. 2, 5, 9, 11    C. 2, 7, 17, 23    D. 3, 7, 13, 21    E. 19, 29, 33, 57
24. How many positive multiples of 9 are odd numbers and have a value less than 72? A. 3    B. 4    C. 5    D. 6    E. 7
25. Express $3\frac{7}{20}$ as a decimal. A. 3.27    B. 3.72    C. 3.31    D. 3.35    E. 3.53
26. 4 times the product of 3 consecutive positive counting numbers is 24. What is the sum of these three consecutive numbers? A. 2    B. 4    C. 5    D. 6    E. 8
27. Sierra spent $\frac{3}{8}$ of her savings on a dress. If the dress cost \$24, how much money did she have in her savings before buying the dress? A. \$72    B. \$64    C. \$39    D. \$15    E. \$9
28. Express 3 hours as a fraction of one day in its simplest form. A. $\frac{1}{8}$ B. $\frac{1}{7}$ C. $\frac{1}{6}$ D. $\frac{3}{10}$ E. $\frac{3}{12}$

29. How many yards are in 1 mile? A. 100      B. 914      C. 1760      D. 5280      E. 63360
30. Which fraction below is closest to 4? A. $\frac{9}{2}$ B. $\frac{21}{4}$ C. $\frac{19}{6}$ D. $\frac{31}{8}$ E. $\frac{21}{5}$
31. What is the value of 6 hundredths less than 10.66? A. 16.66      B. 10.72      C. 10.06      D. 10.60      E. 4.66
32. What is the measure of the angle shown on the shape?  A. $270^\circ$ B. $250^\circ$ C. $225^\circ$ D. $180^\circ$ E. $90^\circ$
33. When twice the perimeter of a square is tripled, the result is 72. What is the area of the original square? A. 8      B. 9      C. 12      D. 16      E. 144
34. In 20 years, Ely will be 31 years old and Donni will be 35 years old. What is the sum of their ages now? A. 106      B. 86      C. 66      D. 46      E. 26
35. The product of two whole numbers is 48. Which of the followings could not be their sum? A. 49      B. 26      C. 20      D. 19      E. 14
36. Incrediburg's bus lines are numbered starting with 66 and ending with 99, counting by 3s. How many bus lines does Incrediburg have? A. 33      B. 14      C. 13      D. 12      E. 11
37. Each cabin needs $\frac{3}{5}$ acre of land. If there are 12 cabins, how much land is needed? A. $6\frac{5}{36}$ acres      B. $6\frac{4}{5}$ acres      C. $7\frac{1}{6}$ acres      D. $7\frac{1}{5}$ acres      E. $7\frac{5}{12}$ acres
38. Forty minutes after 4:40 pm is the same as forty minutes before _____. A. 5:20 a.m.      B. 6:00 p.m.      C. 6:00 a.m.      D. 6:10 p.m.      E. 6:20 p.m.
39. If my choir class has four times as many girls as boys, then the number of girls minus the number of boys could be _____. A. 32      B. 28      C. 26      D. 24      E. 23
40. Sandy uses $8\frac{1}{3}$ pounds of tomatoes per batch of red sauce. How many pounds of tomatoes would she need to make 7 batches of red sauce? A. $56\frac{1}{3}$ B. $57\frac{2}{3}$ C. $58\frac{1}{3}$ D. $58\frac{1}{9}$ E. $58\frac{2}{3}$

# MATH CHALLENGE TOURNAMENT

## MASTERS

April 20, 2019



### Mental Math Challenge

Grade 4

Problem 1 – 40

**Do not begin until you are instructed to do so.**

***Mental Math Challenge (15 minutes)***

Mark your answers on the ANSWER SHEET.

You may not do any written work.

Solve as many problems as you can.