MATH 6 TEST 4

Name_____ Date_____

Directions: Complete as many problems as you can in the 30 minutes allotted to you. No calculators!

1. Round 449.4999 to the nearest whole number.
   (**A**) 400 (**B**) 449 (**C**) 449.4 (**D**) 449.5 (**E**) 450

2. Which of the following has the smallest value?
   (**A**) $\frac{426}{34}$ (**B**) $\frac{426}{35}$ (**C**) $426 \div 36$ (**D**) $427 \div 36$ (**E**) $36\overline{)428}$

3. Express 0.24 as a reduced fraction.
   (**A**) $\frac{4}{25}$ (**B**) $\frac{6}{25}$ (**C**) $\frac{8}{25}$ (**D**) $\frac{12}{25}$ (**E**) $\frac{13}{25}$

4. After rounding each of the following to the nearest whole number, which of the following will be the least?
   (**A**) $476\frac{41}{80}$ (**B**) $476\frac{33}{65}$ (**C**) $476\frac{17}{35}$ (**D**) $476\frac{31}{60}$ (**E**) $476\frac{117}{200}$

5. What is the sum of the two smallest prime numbers greater than 48?
   (**A**) 100 (**B**) 104 (**C**) 108 (**D**) 110 (**E**) 112

6. Multiply 10.1×12.8 and round to the nearest tenths place.
   (**A**) 14.1 (**B**) 129.2 (**C**) 129.3 (**D**) 140.8 (**E**) 141.0

7. What is the difference between twenty-four and eight thousandths, and two and four ten-thousandths?
   (**A**) 22.00076 (**B**) 22.00084 (**C**) 22.0074 (**D**) 22.0076 (**E**) 22.0084

8. Which is true?
   (**A**) $\frac{4}{5} < 0.785$ (**B**) $79\% > \frac{4}{5}$ (**C**) $79\% < 0.785$ (**D**) $0.8 < 79\%$ (**E**) $0.8 > \frac{79}{100}$

9. Which would produce the largest quotient?
   (**A**) $\frac{3}{4} \div \frac{1}{6}$ (**B**) $\frac{3}{4} \div \frac{1}{4}$ (**C**) $\frac{3}{4} \div \frac{1}{3}$ (**D**) $\frac{3}{4} \div \frac{1}{5}$ (**E**) $\frac{3}{4} \div \frac{1}{2}$

10. If Bob can stuff 90 envelopes every half hour and Bill can stuff 2 envelopes every minute, how much longer will it take Bill to stuff 180 envelopes than Bob?
    (**A**) 20 minutes (**B**) 30 minutes (**C**) 40 minutes (**D**) 45 minutes (**E**) 60 minutes

11. For your birthday party, you want to order a sandwich that is several feet long that can feed 24 people. If each person eats 6 inches of the sandwich, how long does the sandwich need to be?
    (**A**) 4 feet (**B**) 6 feet (**C**) 8 feet (**D**) 9 feet (**E**) 12 feet

12. Which result is the largest difference?
    (**A**) $751.3 - 79.899$ (**B**) $751.11 - 79.899$ (**C**) $751.123 - 79.899$ (**D**) $751.3 - 79.99$ (**E**) $751.3 - 79.999$

13. If you need to fertilize 360.06 square yards of grass and one small bag of fertilizer covers 5 square yards, how many bags of fertilizer would you need to *totally* finish the grass?
    (**A**) 70 (**B**) 71 (**C**) 72 (**D**) 73 (**E**) 74

14. Which of the following will produce the largest remainder?

(**A**) $17{,}753{,}152 \div 2$ (**B**) $397{,}795 \div 5$ (**C**) $4013 \div 9$ (**D**) $4014 \div 9$ (**E**) $4015 \div 9$

15. Which is the largest number?

(**A**) 3.01×10 (**B**) 0.301×100 (**C**) $0.00301 \times 10{,}000$ (**D**) $0.301 \times 1{,}000$ (**E**) $30{,}100 \div 1{,}000$

16. If a pencil costs 85 cents and you pay eight-tenths of this amount, how much did you pay?

(**A**) 66 cents (**B**) 68 cents (**C**) 70 cents (**D**) 72 cents (**E**) 74 cents

17. Which is the reciprocal of $1\frac{3}{4}$?

(**A**) $\frac{4}{7}$ (**B**) $\frac{4}{8}$ (**C**) $\frac{4}{12}$ (**D**) $\frac{4}{15}$ (**E**) $\frac{7}{4}$

18. Which is true?

(**A**) $6 \times 8 > 7 \times 7$ (**B**) $9 \times 7 > 8 \times 8$ (**C**) $\frac{1}{4} + \frac{1}{4} > \frac{1}{4} \times \frac{1}{4}$ (**D**) $\frac{1}{4}$ of $28 < \frac{1}{5}$ of 30 (**E**) $\frac{1}{2} + \frac{1}{2} < \frac{6}{7} \times \frac{6}{7}$

19. Which quantity is the smallest?

(**A**) 32% (**B**) $0.319 \times \frac{7}{8}$ (**C**) 0.319 (**D**) $\frac{1}{6} + \frac{1}{6}$ (**E**) $\frac{8}{24}$

20. Which is the largest quantity?

(**A**) $297.8 + 297.8 + 297.8$ (**B**) $(4 \times 297.8) - 297.7$ (**C**) $(5 \times 297.8) - (2 \times 297.7)$

(**D**) $(6 \times 297.8) - (3 \times 297.7)$ (**E**) $(2 \times 297.8) + 297.7$

21. Which has the smallest GCF?

(**A**) 12 and 16 (**B**) 15 and 24 (**C**) 20 and 30 (**D**) 24 and 36 (**E**) 36 and 45

22. Which is the greatest difference?

(**A**) $254.2 - (16.777 + 4.33)$ (**B**) $254.2 - (16.777 + 4.34)$ (**C**) $254.2 - (16.7666 + 4.33)$

(**D**) $254.2 - (16.78 + 4.34)$ (**E**) $253.2 - (16.7666 + 4.33)$

23. Which has the smallest LCM?

(**A**) 4 and 5 (**B**) 5 and 6 (**C**) 6 and 8 (**D**) 6 and 9 (**E**) 6 and 10

24. A clock is malfunctioning such that the minute hand moves 45 minutes every hour. If you set the clock at the correct time at 8:00 AM, what time will the clock read when the actual time is 4:00 pm of the same day?

(**A**) 1:30 pm (**B**) 1:45 pm (**C**) 2:00 pm (**D**) 2:15 pm (**E**) 2:30 pm

25. Which of the following has the least value?

(**A**) $6\frac{1}{2} + 6\frac{1}{2} + 6\frac{1}{2} + 6\frac{1}{2}$ (**B**) $4 \times 6\frac{2}{3}$ (**C**) $\left(2 \times 6\frac{2}{3}\right) + \left(2 \times 6\frac{2}{3}\right)$

(**D**) $\left(3 \times 6\frac{1}{2}\right) + 6\frac{3}{5}$ (**E**) $\left(5 \times 6\frac{1}{2}\right) - 6\frac{2}{3}$

MATH 6 TEST 4 ANSWERS

1. B	2. C	3. B	4. C	5. E
6. C	7. D	8. E	9. A	10. B
11. E	12. A	13. D	14. C	15. D
16. B	17. A	18. C	19. B	20. D
21. B	22. C	23. D	24. C	25. E

1. 449

2. Choice C is smaller than A and B because the dividend for C is larger. Choice C is smaller than D and E because the divisor is smaller.

3. $0.24 = \frac{24}{100} = \frac{6}{25}$

4. For $476\frac{17}{35}$, the numerator is less than half of the denominator and will be the smallest.

5. $53 + 59 = 112$

6. $10.1 \times 12.8 = 129.28 = 129.3$

7. $24.008 - 2.0004 = 22.0076$

8. $0.8 > \frac{79}{100}$

9. The dividends are all the same. Therefore the smallest divisor will produce the largest quotient which will be $\frac{1}{6}$.

10. If Bob can do 90 envelopes in 30 minutes, then he can do 180 envelopes in 60 minutes. Bill can do 180 envelopes in $180 \div 2 = 90$ minutes. Therefore it would take Bill 30 minutes longer.

11. If one person eats 6 inches, then two people will eat 1 foot. Therefore $24 \div 2 = 12$ feet.

12. Choice A, B, and C have the same subtrahend. The largest difference will have the largest minuend which eliminates B and C. Choices A, D, and E have the same minuend. Therefore the smallest subtrahend will produce the largest difference which will be A.

13. $360 \div 5 = 72$ bags. Therefore 360.06 will require another bag, or 73.

14. Choices A and B are obviously 0 which eliminates them. $4013 \div 9$ has a remainder of 8. Therefore 4014 will have a remainder of 0 and 4015 will have a remainder of 1.

15. Choice D = 301 and will be the largest.

16. $85 \times 0.8 = 68$

17. The reciprocal of $1\frac{3}{4}$ or $\frac{7}{4}$ is $\frac{4}{7}$.

18. $\frac{1}{4} + \frac{1}{4} > \frac{1}{4} \times \frac{1}{4} \rightarrow \frac{2}{4} > \frac{1}{16} \rightarrow \frac{8}{16} > \frac{1}{16}$

19. Choices D and E simplify to one-third which are greater than 33% and are eliminated. Choice A = 0.32 which is larger than C. Choice B is a fraction of C. Therefore B.

20. Choice A = 3×297.8. Choice B increased by 297.8 over A but also decreased by 297.7. Therefore B is larger. Choices C and D follow the same pattern. Therefore B and C are eliminated. Choice E follows the reverse pattern. It has one fewer addend of 297.8 but an additional addend of 297.7 for a net decrease. Therefore D is the largest.

21. 15 and 24 have a GCF of 3.

22. Choices A, B, C, and D have the same minuend. Therefore the smallest subtrahend will produce the greatest difference. Therefore A, B, and D are eliminated. The subtrahends of C and E are the same. Therefore the greatest difference will have the larger minuend which is C.

23. The smallest number that 6 and 9 go into evenly is 18 which will be the smallest.

24. $8{:}00 + \left(\frac{3}{4} \times 8\right) = 8{:}00 + 6$ hours equals 2:00

25. Choice A = $4 \times 6\frac{1}{2}$ which eliminates B. Choice C can also be written as B and will be eliminated. Choice D can be written as 4 addends. The fourth addend of D will be larger than the fourth addend of A, thus eliminating D. Choice E = choice A + $+6\frac{1}{2} - 6\frac{2}{3}$. Since $6\frac{2}{3} > 6\frac{1}{2}$, choice E will be the smallest.