MATH 7 TEST 3

Name_____ Date_____

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

1. What is the decimal equivalent to $17\frac{17}{99}$?

(**A**) $17.\overline{17}$ (**B**) 17.1896 (**C**) $17.\overline{171}$ (**D**) 17.172 (**E**) $17.\overline{189}$

2. Simplify $\left(7\times10^4\right)+\left(5\times10^2\right)+\left(4\times\frac{1}{1{,}000}\right)$.

(**A**) 7,500.0004 (**B**) 7,500.004 (**C**) 70,500.004 (**D**) 75,000.004 (**E**) 70,500.0004

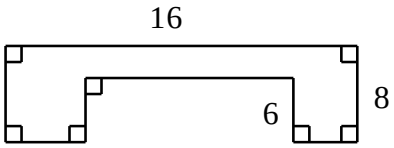
3. What is the least common denominator for the following fractions? $\frac{7}{18};\frac{5}{16};\frac{3}{20}$

(**A**) 360 (**B**) 720 (**C**) 1,800 (**D**) 2,400 (**E**) 3,600

4. Which of the following is not a factor of 210?

(**A**) 14 (**B**) 15 (**C**) 35 (**D**) 36 (**E**) 42

5. Find the perimeter.



(**A**) 48 (**B**) 54 (**C**) 56 (**D**) 60 (**E**) 64

6. Tim traveled 300 miles at 20 miles per hour. Tom went the same distance but took 10 hours longer. Find the difference between their two rates in miles per hour.

(**A**) 3 (**B**) 4 (**C**) 8 (**D**) 10 (**E**) 12

7. An 24-yard piece of rope was cut into $3\frac{1}{5}$ inch pieces. How many pieces could be made?

(**A**) 90 (**B**) 180 (**C**) 240 (**D**) 260 (**E**) 270

8. Which of the following numbers is the largest?

(**A**) $6.\overline{43}$ (**B**) $6.\overline{434}$ (**C**) $6.4\overline{343}$ (**D**) $6.433\overline{9}$ (**E**) $6.4343\overline{9}$

9. Which is the greatest difference?

(**A**) $16\frac{1}{2}-\left(7\frac{1}{3}+2\frac{1}{6}\right)$ (**B**) $16\frac{1}{2}-\left(7\frac{1}{3}+2\frac{1}{5}\right)$ (**C**) $16\frac{1}{2}-\left(7\frac{1}{3}+2\frac{1}{8}\right)$ (**D**) $16\frac{1}{2}-\left(7\frac{1}{3}+2\frac{1}{4}\right)$ (**E**) $16\frac{1}{2}-\left(7\frac{1}{3}+2\frac{1}{7}\right)$

10. If your average on four tests is 96, and three of your test scores are 93, 99, and 97, what is your fourth test score?

(**A**) 93.5 (**B**) 94 (**C**) 94.5 (**D**) 95 (**E**) 95.5

11. After rounding each of the following to the nearest thousandths place, which of the following would be the largest?

(**A**) 82.828282 (**B**) 82.824999 (**C**) 82.826888 (**D**) 82.827499 (**E**) 82.8269999

12. What is the next number in the following sequence? $756\frac{1}{8};701\frac{5}{8};647\frac{1}{8};$ _____

(**A**) $592\frac{5}{8}$ (**B**) $593\frac{5}{8}$ (**C**) $594\frac{5}{8}$ (**D**) $595\frac{5}{8}$ (**E**) $596\frac{5}{8}$

13. At the football game, $76,378.50 was collected and each person paid $8.25. How many people paid?
(**A**) 9,256 (**B**) 9,258 (**C**) 9,260 (**D**) 9,262 (**E**) 9,264

14. The number of students in the school that have a cell phone is 400% of the number that had one last year. If 200 students had a cell phone last year, how many have one this year?
(**A**) 50 (**B**) 80 (**C**) 600 (**D**) 800 (**E**) 1,000

15. A circle with a diameter of 24 inches has an area how much larger than a circle with a radius of 8 inches?
(**A**) 4π (**B**) 16π (**C**) 20π (**D**) 40π (**E**) 80π

16. Eight-ninths of the tennis balls that were made could be used. If 954 balls were made, how many of them could *not* be used?
(**A**) 106 (**B**) 108 (**C**) 144 (**D**) 810 (**E**) 848

17. The diameter of a circle is $5\frac{7}{11}$ inches and the radius is $2\frac{9}{11}$ inches. Find the value of $\frac{18}{\text{diameter} \div \text{radius}}$.

(**A**) 2 (**B**) 3 (**C**) 6 (**D**) 9 (**E**) 18

18. $80\% \times 20\% \times 4\frac{7}{8} \times 100\%$ equals what percent?
(**A**) 32% (**B**) 39% (**C**) 68% (**D**) 72% (**E**) 78%

19. If 26.8 grams of saltwater contains 26% water, how many grams of salt are there?
(**A**) 19.832 (**B**) 7.968 (**C**) 7.068 (**D**) 6.978 (**E**) 6.968

20. Tammy completed the race 3.1 minutes sooner than Tara. Terry completed the race 24 seconds after Tammy. How many minutes longer did it take Tara than Terry to complete the race?
(**A**) 2.5 (**B**) 2.6 (**C**) 2.7 (**D**) 2.8 (**E**) 2.9

21. The town population is 3,000% of what it was before the gold rush. If there are 15,000 people now, how many were there before the gold rush?
(**A**) 5 (**B**) 20 (**C**) 50 (**D**) 200 (**E**) 500

22. The temperature in Miami is 80° F and the temperature in Atlanta is 40° F. If the temperature decreases 20% in Miami and increases 20% in Atlanta, what is the difference in temperature between the two cities?
(**A**) 0° F (**B**) 12° F (**C**) 8° F (**D**) 16° F (**E**) 6° F

23. If you change your television channel 180 times in $15\frac{5}{6}$ minutes, how many times will you change it in $1\frac{7}{12}$ minutes at that rate?
(**A**) 16 (**B**) 18 (**C**) 20 (**D**) 22 (**E**) 24

24. Four pizzas cost $20 total and each pizza feeds 7 people. How much would it cost to feed 133 people?
(**A**) $90 (**B**) $95 (**C**) $100 (**D**) $105 (**E**) $110

25. If you borrowed $1,000 at a 4.5% annual interest rate and pay $90 in interest, how many months did you borrow the money?
(**A**) 6 (**B**) 9 (**C**) 12 (**D**) 18 (**E**) 24

MATH 7 TEST 3 ANSWERS

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

1. $17.\overline{17}$
2. 70,500.004
3. $2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 \cdot 3 \cdot 5 = 720$
4. 36
5. 48 + 12 = 60
6. 20 – 12 = 8
7. $24 \cdot 36 \cdot \frac{5}{16} = 270$
8. B
9. The minuends are all the same. Therefore the smallest subtrahend will produce the greatest difference. The first addend of each of the subtrahends are all the same and can be ignored. The subtrahend of choice C has the smallest second addend, $2\frac{1}{8}$, and will therefore produce the greatest difference.
10. 96 – 1 = 95
11. A
12. $647\frac{1}{8} - 54\frac{4}{8} = 592\frac{5}{8}$
13. $76,378.50 \div 8.25 = 9258$
14. $4 \cdot 200 = 800$
15. $144\pi - 64\pi = 80\pi$
16. $954 \times \frac{1}{9} = 106$
17. $18 \div 2 = 9$
18. 78%
19. $26.8 \cdot 0.74 = 19.832$
20. 3.1 – 0.4 = 2.7
21. $1500 \div 3 = 500$
22. 64 – 48 = 16
23. $180 \cdot \frac{19}{12} \cdot \frac{6}{95} = 18$
24. 19 x 5 = 95
25. 2 years or 24 months