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

1. The job will require you to work 82 minutes to complete.   If you work $28\frac{3}{19}$ minutes the first day and $28\frac{9}{19}$ minutes the second, how much time is left to complete the project?

(A) $25\frac{7}{19}$ (B) $26\frac{7}{19}$ (C) $26\frac{12}{19}$ (D) $27\frac{7}{19}$ (E) $36\frac{12}{19}$

2. Which has the largest least common multiple?
(A) 4 and 3   (B) 4 and 5   (C) 4 and 6   (D) 4 and 7   (E) 4 and 8

3. Which set of fractions are getting larger from left to right?
(A) $\frac{18}{63},\frac{28}{49},\frac{33}{77}$ (B) $\frac{18}{63},\frac{33}{77},\frac{28}{49}$ (C) $\frac{33}{77},\frac{28}{49},\frac{18}{63}$ (D) $\frac{33}{77},\frac{18}{63},\frac{28}{49}$ (E) $\frac{28}{49},\frac{33}{77},\frac{18}{63}$

4. Sixteen and fourteen thousandths is written which of the following ways?
(A) 16.014   (B) 16.14   (C) 16.0014   (D) 16.14000   (E) 16.00014

5. Which pair of numbers has the smallest GCF?
(A) 24 and 18   (B) 16 and 32   (C) 46 and 24   (D) 76 and 80   (E) 77 and 84

6. In 3 hours and 22 minutes, it will be 2:09 p.m.. What time will it be in 37 minutes?
(A) 10:10 a.m.   (B) 11:04 a.m.   (C) 11:14 a.m.   (D) 11:24 a.m.   (E) 12:08 p.m.

7. A realtor made $5,355 on the sale of a house that sold for $126,000. Find the rate of commission.
(A) 4%   (B) 4.25%   (C) 4.5%   (D) 5%   (E) 5.25%

8. Write 6.4% as a reduced fraction.
(A) $\frac{2}{25}$ (B) $\frac{4}{25}$ (C) $\frac{6}{25}$ (D) $\frac{8}{25}$ (E) $\frac{8}{125}$

9. After changing each of the following fractions to a mixed number which contains a proper fraction, which of the following will produce a proper fraction that has the smallest numerator?
(A) $\frac{7026}{89}$ (B) $\frac{7028}{89}$ (C) $\frac{7030}{89}$ (D) $\frac{7032}{89}$ (E) $\frac{7034}{89}$

10. After changing each mixed number to an improper fraction, which of the following mixed numbers would produce the smallest numerator when written as an improper fraction?
(A) $876\frac{1}{16}$ (B) $875\frac{3}{16}$ (C) $874\frac{5}{16}$ (D) $873\frac{7}{16}$ (E) $872\frac{9}{16}$

11. Which of the following has the smallest quotient?
(A) $86\frac{19}{37}\div7\frac{15}{23}$ (B) $86\frac{19}{38}\div7\frac{15}{22}$ (C) $86\frac{17}{39}\div7\frac{16}{19}$ (D) $86\frac{18}{39}\div7\frac{16}{21}$ (E) $86\frac{19}{37}\div7\frac{15}{22}$

12. You bought 10.2 gallons of gas at $3.00 per gallon. If you normally pay $26.52 for 10.2 gallons, how much did you pay extra per gallon?
(A) $0.30   (B) $0.32   (C) $0.36   (D) $0.38   (E) $0.40

13. A few years ago, our national debt was $9,000,000,000,000. If there were 300,000,000 Americans, how much debt was that per American on average?
(A) $3,000   (B) $30,000   (C) $300,000   (D) $3,000,000   (E) $30,000,000

14. Which is the reciprocal of $1\dfrac{3}{4}$?

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

15. How many whole numbers are there between 51 and 92 that are divisible by 13?
(A) 2   (B) 3   (C) 4   (D) 5   (E) 6

16. The number of sides of an octagon minus the number of sides of a hexagon plus the number of sides of a decagon equals
(A) −9   (B) −8   (C) 11   (D) 12   (E) 13

17. A school contains sixth, seventh, and eighth grade. If five-twelfths of the students were in sixth grade and one-eighth were in eighth grade, what fraction of the students were in seventh grade?

(A) $\dfrac{21}{48}$ (B) $\dfrac{23}{48}$ (C) $\dfrac{11}{24}$ (D) $\dfrac{13}{24}$ (E) $\dfrac{7}{10}$

18. If you travel 64 miles in $2\dfrac{2}{7}$ hours, how many miles can you travel in $7\dfrac{1}{2}$ hours?

(A) 209   (B) 210   (C) 211   (D) 212   (E) 213

19. You line up balls along the wall from end to end and each ball has a radius of 3 inches. If there are 72 balls, what is the width of the wall in feet?
(A) 12   (B) 16   (C) 18   (D) 24   (E) 36

20. Find the value of $\dfrac{(5\times298)+(5\times299)+(5\times301)+(5\times302)}{5}$.

(A) 300   (B) 600   (C) 900   (D) 1,200   (E) 1,500

21. A school has 600 students and three-twentieths were absent. If 20% of the remaining students were on a field trip, how many students were still in school?
(A) 72   (B) 102   (C) 400   (D) 408   (E) 528

22. The merchandise was $26 before tax. If the tax percentage was 5.5%, what is the final price?
(A) $27.33   (B) $27.43   (C) $27.53   (D) $27.63   (E) $40.30

23. If $\sqrt{\dfrac{x+y}{z}}=4$, find the value of $26-\sqrt{\dfrac{x+y}{z}}\times2$
(A) 18   (B) 20   (C) 22   (D) 24   (E) 44

24. A store is selling a pair of pants for $70 and then drops the price 5%. Another store is selling the same pants for $60 and then increases the price 5%. What is the difference in the new prices between the two stores?
(A) $0   (B) $1.50   (C) $2.00   (D) $2.50   (E) $3.50

25. When writing 81,080 in expanded notation as $(a\times10,000)+(b\times1,000)+(c\times100)+(d\times10)+(e\times1)$, find the value of $a+b-d+c+e$.
(A) 0   (B) 1   (C) 15   (D) 16   (E) 17

MATH 7 TEST 2 ANSWERS

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

1. $82 - 56\dfrac{12}{19} = 25\dfrac{7}{19}$

2. Choice D will have the largest LCM which is 28.

3. Reducing choice A yields $\dfrac{2}{7}, \dfrac{4}{7}, \dfrac{3}{7}$. Therefore B

4. 16.014

5. The GCF of 46 and 24 is 2, which is least.

6. $10\!:\!47 + 37 = 11\!:\!24$

7. $\dfrac{5355}{1260} = 4.25\%$

8. $\dfrac{64}{1000} = \dfrac{8}{125}$

9. Only divide choice A. Choice A = 78 remainder 84 or $78\dfrac{84}{89}$. The dividend of following choices increases by 2. Therefore

the numerator will continually increase by 2. Choice C will be $78\dfrac{88}{89}$ which is the largest the numerator can be. Choice D =

$78\dfrac{90}{89} = 79\dfrac{1}{89}$ which is the smallest the numerator can be.

10. Even though the numerators of the mixed fractions are increasing by two from left to right, the whole number is decreasing by 1 , which will decrease the numerator of the improper fractions by 16 from left to right. Therefore the numerators of the improper fractions will decrease from left to right and choice E will have the smallest numerator.

11. $86\dfrac{17}{39} \div 7\dfrac{16}{19}$

12. $3.00 - 2.60 = 0.40$

13. 30,000

14. The reciprocal of $1\dfrac{3}{4}$ or $\dfrac{7}{4}$ is $\dfrac{4}{7}$.

15. 52, 65, 78, 91

16. $8 - 6 + 10 = 12$

17. $\dfrac{24}{24} - \dfrac{13}{24} = \dfrac{11}{24}$

18. $64 \cdot \dfrac{15}{2} \cdot \dfrac{7}{16} = 210$

19. $72 \cdot \dfrac{6}{12} = 36$

20. $4 \times 300 = 1200$

21. $600 \cdot \dfrac{17}{20} = 510 \rightarrow 510 \cdot 0.8 = 408$

22. $26 \cdot 1.055 = 27.43$

23. $26 - 4 \cdot 2 = 18$

24. $66.5 - 63 = 3.50$

25. $8 + 1 - 8 + 0 + 0 = 1$