FINAL ASSESSMENT

MATH 105

DO NOT WRITE ON EXAM!

SCRATCH PAPER IS PROVIDED!

PUT ANSWERS ON SCANTRON!

NO CALCULATORS!

NO CELL PHONES!

1. Write the whole number $1,602$ in words.
   (a) One thousand sixty-two   (b) one hundred sixty-two
   (c) One thousand, six hundred two   (d) One and six hundred-two

2. Write the whole number in standard form: Miriam earned twenty-six thousand dollars last year.
   (a) 26,000   (b) 206,000   (c) 2,600   (d) 20,006

3. The difference of 743 and 66 is   (a) 809   (b) 677   (c) 49038   (d) 11 R 1

4. Divide $282 \div 3$ (a) 94   (b) 95   (c) 279   (d) 285

5. Multiply 1.23 by 100   (a) 0.012   (b) 0.123   (c) 12.3   (d) 123

6. Simplify $2 + 4(3^2 - 4)$ (a) 10   (b) 12   (c) 22   (d) 30

7. List all the factors of 12   (a) $1, 2, 3, 4, 6, 12$ (b) $1, 12$ (c) $12, 24, 36 \cdots$ (d) 12

8. The prime factorization of 153 is   (a) $3^2 \cdot 17$ (b) 9   (c) $3^3 \cdot 17$ (d) $2^3 \cdot 17$

9. Which of the following statements is **FALSE**?
   (a) 10 is a composite number   (b) 2 is the only even prime number
   (c) If the sum of the digits of a number is divisible by 3, then the original number is divisible by 3
   (d) A number is divisible by 10 if it ends in 5.

10. Find the LCM of 12 and 84.   (a) 2   (b) 12   (c) 84   (d) 1,008

11. Build $\dfrac{5}{9}$ into an equivalent fraction with 27 as denominator   (a) $\dfrac{5}{27}$,   (b) $\dfrac{15}{27}$,   (c) $\dfrac{27}{5}$ (d) $\dfrac{8}{27}$

12. Add and reduce (if possible) $\dfrac{2}{3} + \dfrac{1}{12}$ (if possible).   (a) $\dfrac{3}{15}$ (b) $\dfrac{3}{5}$ (c) $\dfrac{1}{2}$ (d) $\dfrac{3}{4}$

13. Rewrite the difference $5\dfrac{2}{7} - 2\dfrac{1}{7}$ as a mixed number.   (a) $3\dfrac{3}{7}$ (b) $3\dfrac{1}{7}$ (c) $7\dfrac{2}{7}$ (d) $\dfrac{22}{0}$

14. Add: $8\dfrac{9}{11} + 12\dfrac{7}{11} =$ (a) $20\dfrac{5}{11}$ (b) $20\dfrac{8}{11}$ (c) $21\dfrac{5}{11}$ (d) $21\dfrac{5}{22}$

15. Determine which of the following is equivalent to $\dfrac{6}{26}$:   (a) $\dfrac{3}{13}$ (b) $\dfrac{6}{13}$ (c) $\dfrac{13}{3}$ (d) $\dfrac{26}{6}$

16. Write the decimal number 4.06 in words:
    (a) four and six hundreds   (b) four point zero six
    (c) four and six hundredths   (d) four and six tenths

17. White boxes and black boxes are stored as shown. What fraction of stored space is occupied by the black boxes?

(a) $\frac{7}{3}$　(b) $\frac{3}{7}$　(c) $\frac{7}{4}$　(d) $\frac{4}{7}$

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18. Write the decimal 0.48 as a fraction or a mixed number in simplest form.

(a) $\frac{12}{25}$　(b) $1\frac{24}{5}$　(c) $\frac{5}{24}$　(d) $\frac{6}{125}$

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19. Find the total monthly cost of operating an industrial machine if

Monthly equipment rental is　　$393.94
Monthly insurance cost is　　　$90.40
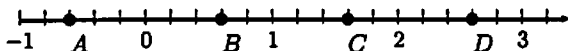Average monthly cost of fuel is　$75.20
Average maintenance cost is　　$33.60

(a) $583.14　(b) $583.24　(c) $593.14　(d) $594.14

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20. May bought a piece of custom jewelry for 81.40. How much change is she owed from a $100 bill?

(a) $17.60　(b) $18.40　(c) $18.60　(d) $19.60

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21. Find the quotient of 24 and 0.04　　(a) 600　(b) 60　(c) 0.6　(d) 0.06

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22. Which point is located at $\frac{13}{5}$?　　(a) A　(b) B　(c) C　(d) D

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23. Write the fraction as a percent. $\frac{7}{20}$　　(a) 0.35%　(b) 3.5%　(c) 35%　(d) 350%

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24. Write the percent 247% as a decimal.　　(a) 2.47　(b) 24.7　(c) 2,470　(d) 24,700

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25. 20% of your class is under 5 ft 5 inches tall. If 45 students are in your class, how many of students are under 5 ft 5 inches?　　(a) 9　(b) 25　(c) 50　(d) 90