Math 40 Exam 1 Review   **NO WORK=NO CREDIT**
You may not use a calculator on this exam. Circle or box you answer. Write neatly Show all work.
1. a)Express four million, nine thousand, two hundred six in standard form:
   b) Write 2,000,093 in written form:
2. Round the number 517,340,203 to the nearest ten thousand_____.
3. Multiply or divide.

a) 232 X 53   b) $21\overline{)4305}$ c) **85 ÷ 0**   d) $\mathbf{4(-2)(2)}$ e) $\mathbf{-7(-9)(1)}$ f) $\dfrac{35}{-7}$ g) $81 \div 3 \cdot 3$

4. What is a prime number?

5. Find the prime factorization of 360

6. Of the following numbers 0, 1, -2, 5, -99 which are
a) Whole numbers   b) Natural Numbers   c) Integers
7. Insert one of the symbols $<$ or $>$ in the space between the two numbers. **(show work)**
a)   –5   2   b) $\mathbf{-(-5)}$ $-|-5|$
8. Evaluate each expression.
a) $13+(-44)$ b) $5-(-4)$ c) $\dfrac{-10+28}{2+7}$
d) $(-2)^2 + 2[1-(-8+2)]$ e) $25 \div 5(-2)$ f) $-\dfrac{10}{2}+\dfrac{28}{7}$
g) $7 - |-4 - (-6)|$
9. Solve the following equations.

a) $113 = x - 307$ b) $18y = 90$ c) $\dfrac{d}{100} = 11$ d) $x-(-3)=4$

e) $8+d = -5$ f) $-8x = 16$ g) $0 = \dfrac{s}{-3}$ h) $-7+d = -4$
10. Circle the correct answer: Which of the following is an example of the use of the commutative property of multiplication? **(you need to know all of the properties of multiplication and addition)**
a) $4 \bullet 2 = 2 \bullet 4$ b) $(3+4)+5 = 3+(4+5)$ c) $6\bullet 0 = 0$ d) $6 \bullet 1 = 6$ e) none of these

11. Use integers to describe your answer. July opened a checking account with an initial deposit of $1000. She then deposited $300 and wrote checks for $865, $200, and $341. What is her new account balance? Did she bounce a check?

12. A family is traveling to there favorite vacation spot 3200 miles away. The family wants to stop every 400 miles to rest and eat. How many stops will the family make on the trip?

13. If there are 21 rooms in a building and 4 people in each room, then how many people are there in the room?

14. The temperature in Colorado during the day was 64 degrees Farenheit. The temperature dropped to -15 degrees during the night. What was the difference in temperature from day to night. Express the result using integers.

15. Evaluate.
a) $ab - c^2 \ for \ a = -1, b = -2, c = -3$ b) $a^2 + a \ for \ a = -2$

16. D=RT
A plane is traveling at 450 mph. How far will the plane travel in 4 hours?

17. The length of a rectangular room is 14 feet and the width is 11 feet.
a) find the perimeter of the room.   b) find the area of the room.

1. A) 4,009,206 b) two million, ninety-three.

2. 520,000,000

3. A) 12,296   b) 205   c) undefined   d) -16   e) 63 f) -5   g) 81

4. A whole number greater than one with only 1 and itself as factors.

5. $2^3 \cdot 3^2 \cdot 5$

6. a) 0,1,5   b) 1,5   c) 0,1,-2,5,-99

7. a) <   b) 5> -5

8. a) -31   b) 9   c)-2   d) 18   e) -10   F) -1   g) 5

9. A) 420   B) 5   c) 1100   d) 1   e) -13   f) -2   g) 0   h) 3

10. A

11. -$106, yes

12. 8 stops

13. 84 people

14.   -79 degrees.

15. A) -7, b)2

16. 1800 miles

17. A) 50 feet b) 154 sqft