ANSWERS QUIZ 1

Real Quiz 1 AU13 MATH 65; DO PROBLEMS 1 TO 7 IN CLASS; THE REST ARE TAKE HOME(8 TO 12). Write on white pages with this test sheet. Turn in your written work only on white sheets; SEPARATE papers and take test sheet home and do the Take Home Part BELOW.

The first 4 problems are from sec. 1.1.

1. **Evaluate (p + q)/q for p = 0 and q =3.** $\frac{(0+3)}{3} = \frac{3}{3} = 1$
2. **If b = 6 ft and h = 8 ft for a rectangle, what is the area?** $(8ft)(6ft) = (6ft)(8ft) = 48ft^2$
3. **Translate the following to mathematics, the international language of the world ! One MORE than the product of two numbers is 50 :** $1 + x \cdot y = 50$
4. **Translate the following equation into mathematics. When 42 is SUBTRACTED from a number, the result is 2314. For extra credit, solve.** → $x - 42 = 2314$

   $x = +42 + 2314$

   $x = 2356$

The next 3 problems are from 1.2

5. **Factor : 10 + 10x + 30y + 30z** $= 10 \cdot (1 + x + 3y + 3z)$
6. **Factor: 60a + 120b** $= 60 \cdot (a + 2b)$
7. **Multiply: (3x + y + 12)6** $= 18x + 6y + 72$

The NEXT probs. are from 1.3 unless noted otherwise and ARE *TAKE HOME*. DUE WED 8/28 AT START OF CLASS .

8. **Find the prime factorization of 2500.** $= 5 \cdot 5 \cdot 2 \cdot 5 \cdot 2 \cdot 5$

   $= 5 \cdot 5 \cdot 5 \cdot 5 \cdot 2 \cdot 2$
9. **Simplify fully : 210/98**
10. **Perform the indicated operation: ADD. 1/2 + 3/4**
11. **Divide and simplify if possible: (2/3) ÷ (7/10). This means 2/3 divided by 7/10.**
12. **SECTION 1.4 :**
    - (a) **Is this sentence TRUE OR FALSE? -1000 < 2. Write TRUE OR FALSE.**
    - (b) **Find the absolute value: | x| , for x = -67.2**
    - (c) **Is this sentence TRUE OR FALSE? | -1000 | < 2. Write TRUE OR FALSE.**
    - (d) **List in order from least to greatest:**

      ~~12~~, -12.5, ~~-17~~, ~~-123~~, 123, -~~122.5~~, ~~14~~, ~~2~~, 0

(9.) $\frac{210}{98} = \frac{2 \cdot 105}{2 \cdot 49} = \frac{2 \cdot 5 \cdot 21}{2 \cdot 7 \cdot 7} = \frac{2 \cdot 5 \cdot 3 \cdot 7}{2 \cdot 7 \cdot 7} = \frac{15}{7}$

(10.) $\frac{1}{2} + \frac{3}{4} = \frac{1}{2} \cdot \frac{2}{2} + \frac{3}{4} \cdot \frac{1}{1} = \frac{2}{4} + \frac{3}{4} = \frac{5}{4}$

(11) $\frac{2}{3} \div \frac{7}{10} = \frac{2}{3} \cdot \frac{10}{7} = \frac{20}{21}$

(12) (a) $-1000 < 2$ TRUE

(b.) $|-67.2| = 67.2$

(c.) $|-1000| < 2$ False

(d.) $-123, -122.5, -17, -12.5, 0, 14, 12$