Name: _____

Paper HW #4 Due 9/8/15
M110

Instructions: *Complete these problems for homework due on the 4th night of class. These should look very similar to those that were covered during our 3rd class meeting.*

1. Fill in the following table by making the **conversions between decimals, fractions/mixed #'s and percentages**. *Work* must always be *shown* – I have left room below the table for that purpose. ***Do not round or approximate.***

Percent	Decimal	Fraction
		$\frac{1}{3}$
	0.6666^{-}	
$52\frac{1}{2}\%$		
		$4\frac{4}{5}$
$\frac{3}{8}\%$		

2. Change each subtraction problem to addition. **Do not** add.

a) $-12 - 413$ b) $-12 - (-413)$

3. Compare the following. Use <, > or = . Show all work in arriving at a single number to compare to a single number. Show expansion of exponents too!

a) -13^2 ◯ $-432 - 23$ b) $(-13)^2$ ◯ $|-432 - (-23)|$

4. At a certain airport, 1.5% of the suitcases are forgotten by owners. Last year, there were 675 forgotten suitcases. How many suitcases arrived on airplanes last year.

5. Simplify completely. Show your work! Fractions must be worked using fractions, decimals as decimals and answers must be in the same form as the original problem. LCD must be used for full credit where appropriate. Improper fractions must be changed to mixed numbers and all fractions given in lowest terms. Decimal movement must be shown in all decimal problems. Long division must be written out long form. Repeating non-terminating decimals need to be represented using a bar over the repeats. Do not round or approximate any answer.

a) $^{5}/_{18} - {}^{3}/_{8}$

b) $-{}^{5}/_{12} + -{}^{5}/_{6}$

c) $^{11}/_{24} + -{}^{7}/_{36}$

d) $5.31 + -8.2$

e) $(-8\,{}^{1}/_{3})({}^{4}/_{5})$

f) $-2 \div -{}^{11}/_{14}$

g) $(0.11)(0.11)$

h) $7.52 \div -0.04$

i) $-75\,{}^{13}/_{75} - 32\,{}^{53}/_{75}$

j) $^{2}/_{15} \div -4\,{}^{3}/_{5}$

k) $\dfrac{-749}{-21}$

6. Use unit ratios for the cost of an ounce of laundry detergent to determine if buying a one major brand over another is more economical. A major retail store sells 150 fl. oz. of Brand T for $17.99 and 75 ounces of Brand D for $12.97. Which is the better buy? Support your answer with unit ratios.

7. Simplify using strict order of operations. Show work in each step.

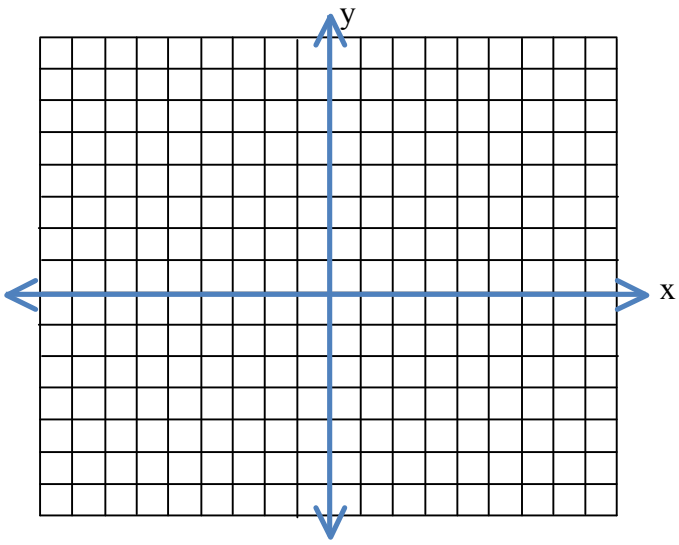
$$\frac{-2\,|\,6 - 27\,|\,\div 3 + 3}{\sqrt{16} - 64 \div 4^2}$$

8. For the equation: $y = -1 + {}^{4}/_{5}\,x$

a) On the line provided, give the y-intercept as an ordered pair. _____

b) On the line provided, give the m = _____
Indicate how you arrived at this answer here.

c) Graph $y = -1 + {}^{4}/_{5}\,x$ on the coordinate system below using the y-intercept and the slope to locate 2 more points. Don't forget to use & label 3 points, put arrows on the line and label the line.



9. Find an equation in slope-intercept form that contains the points below.

x	*y*
-8	33
-4	15
0	-3
4	-21