Name:			

Pre Algebra: Final Review Worksheet

- Basic operations with fractions and decimals Convert between decimals, fractions, percents - Date: 5/15/2012 Period: _____

- A. Convert decimals to fractions (simplified) and fractions to decimals.
- (1) 0.2

- (2) 3.06 (enter as **mixed #**)
- (3) 0.125

(4) $\frac{11}{20}$

(enter with **2 decimal place values**)

(5) $\frac{5}{8}$

(enter with 3 decimal place values)

B. Add, subtract, multiply or divide these fractions as indicated. (enter as **simplified mixed #s**)

(6)
$$\frac{5}{6} + \frac{3}{8}$$

(7)
$$1\frac{1}{2} - \frac{2}{3}$$

(8)
$$\frac{1}{4} \cdot \frac{18}{21}$$

(9)
$$\frac{8}{11} \div \frac{2}{9}$$

(10)
$$5\frac{4}{7} \div \frac{3}{14}$$

(11)
$$\frac{3}{8}\left(2\frac{3}{4}\right) - \frac{1}{2}$$

- C. Round the following numbers to the indicated position. (Remember, when you round you must look at the digit immediately TO THE RIGHT of the indicated position.)
 - (12)0.7649 to the **tenth**
 - (13)-9.0965 to the **hundredth**
 - 365,98<u>7</u>.092 to the **ones** (14)
 - 5.999999 to the **thousandth** (15)
- D. Compare these sets of numbers using <, >, or =. (Multiple Choice)
 - 0.3
- (17) $0.77_{\underline{}}$
- A. < (less than) B. > (greater than) C. = (equal)
- E. Add, subtract, multiply, or divide these numbers as indicated. (Pay close attention to negative signs). Round to the nearest hundredth, if necessary. Enter with 2 decimal place values. NO CALCULATORS
 - (18) 8.03 2.5
- (19) 3.02 ÷ 0.8
- $(20) -0.96 \cdot 0.04$

- (21) -1.6 0.59 (22) 10.8 7.912
- (23) $31.597 \div 1.9$

F. Fill in the table by converting to and from fractions, decimals and percents. (Round to nearest whole percent).

	FRACTIONS (enter as simplified fraction)	DECIMALS (enter with 2 decmal place values)	PERCENTS (round to whole percents)
a.	4/5		
b.			90%
C.		0.04	
d.			8.5%
e.		0.875	

Express each ratio as a fraction in reduced form. (enter as a fraction) G.

(34)60: 40 25 out of 40

Н. Solve each proportion. (The *cross products* are equal) Calculators ok.

Example:

$$\frac{33}{75} = \frac{x}{100} : \qquad 33 \cdot 100 = 75x : \qquad x = 44$$

$$33 \cdot 100 = 75x$$
:

(36)
$$\frac{40}{24} = \frac{75}{x}$$

(37)
$$\frac{25}{6} = \frac{80}{x}$$

I. Express these rates as unit rates. (A unit rate compares a number to one.) Express these ratios in fraction form and then reduce them until the denominator is one. Calculators ok

Example:

200 miles in 4 hours:
$$\frac{200}{4}$$
 miles per hour: 50 mph

(38)456 heartbeats in 3 minutes (39) 449.5 miles per 14.5 gallons

heartbeats in 1 minute

_____ miles per 1 gallon

J.	Solve these percent problems using proportions or a strategy of your choosing.						
Example Notes w	: 95 is w vill go he	what percent of 200? ere					
	(40)	What percent is 6 of 24?	(41)	150 is 250% of what number?			
	(42)	45 is 90% of what number?	(43)	What is 120% of 20?			

J.