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Pre Algebra: Final Review Worksheet

- Basic operations with fractions and decimals Convert between decimals, fractions, percents -

Date: 5/14/2013
Period: $\qquad$
A. Convert decimals to fractions (simplified) and fractions to decimals.
(1) 0.2
(2) 3.06 (enter as mixed \#)
(3) 0.125
(4) $\frac{11}{20}$
(5) $\frac{5}{8}$
(enter with $\mathbf{2}$ decimal place values)
(enter with $\mathbf{3}$ 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
(14) $365,98 \underline{7} .092$ to the ones $\qquad$
(15) 5.999999 to the thousandth
D. Compare these sets of numbers using $<,>$, or $=$. (Multiple Choice)
(16)
$\frac{1}{4} \longrightarrow 0.3$
(17)
$0.77 \quad \frac{7}{9}$
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) $3.02 \div 0.8$
(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 <br> fraction) | DECIMALS (enter with 2 <br> decmal place values) | PERCENTS (round to <br> whole percents) |
| :--- | :---: | :---: | :---: |
| a. | $4 / 5$ |  |  |
| b. |  |  | $90 \%$ |
| c. |  | 0.04 |  |
| d. |  |  | $8.5 \%$ |
| e. |  | 0.875 |  |

G. Express each ratio as a fraction in reduced form. (enter as a fraction)
(34) 60:40
(35) 25 out of 40
H. Solve each proportion. (The cross products are equal) Calculators ok.

Example: $\quad \frac{33}{75}=\frac{x}{100}: \quad 33 \cdot 100=75 \mathrm{x}: \quad \mathrm{x}=44$
(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: $\quad 200$ miles in 4 hours: $\frac{200}{4}$ miles per hour: 50 mph
(38) 456 heartbeats in 3 minutes
$\qquad$ heartbeats in 1 minute
(39) 449.5 miles per 14.5 gallons
$\qquad$ miles per 1 gallon
J. Solve these percent problems using proportions or a strategy of your choosing.

Example: 95 is what percent of 200 ?
Notes will go here
(40) What percent is 6 of 24 ?
(42) 45 is $90 \%$ of what number?
(41) 150 is $250 \%$ of what number?
(43) What is $120 \%$ of 20 ?

