

Name: \_\_\_\_\_  
Test #2 – Fractions, Decimals & §1.7-2.3  
Pre-Algebra @ Gavilan  
Spring 2002

**Instructions:** *Write your name before you begin the test. Show the work to each problem in a clear and organized manner and box your final answer. If you don't show your work on the exam, please indicate where I might find the work, and label it clearly. If there is no work shown for a problem it will be entirely correct or entirely incorrect! Word problems must show all work in the manner that has been shown in class to receive full credit – an answer only may not receive full credit. Work carefully. Good Luck!!*

1. Reduce  $\frac{18}{54}$  to lowest terms. Use either the GCF or prime factorization method and show all of your work.
  
  
  
  
  
  
  
  
  
  
2. Find the LCD for  $\frac{1}{9}$  and  $\frac{1}{21}$ . Use either prime factorization or LCM and show all of your work.
  
  
  
  
  
  
  
  
  
  
3. Build the higher term.  $\frac{2}{3} = \frac{\square}{12}$  so  $\square =$

**Instructions:** For problems 4-10, do the indicated operation and reduce and/or change to a mixed number if necessary.

4. Add  $\frac{13}{54} + \frac{5}{54} =$

5. Subtract  $\frac{10}{21} - \frac{1}{9} =$

6. Multiply  $\frac{4}{7} \cdot \frac{1}{16} =$

7. Divide  $\frac{3}{8} \div \frac{4}{15} =$

8. Add  $1\frac{1}{2} + 2\frac{1}{3} + \frac{5}{12} =$

9. Divide  $2\frac{1}{3} \div 1\frac{1}{6} =$

10. Multiply  $1\frac{3}{4} \cdot 2$



16. Simplify  $47 - 4 [3^2 \div 3 + 1] =$

17. Evaluate when  $x = 4$  and  $y = 1$

$$\frac{(x + y)^2}{16 - x^2}$$

**Instructions:** Follow the instructions on each of the following exponent and translation problems.

18. Evaluate
- a)  $7^0$
  - b)  $10^5$
  - c)  $1^5$

19. Translate each of the following. Define a variable at the beginning.

- a) The sum of 15 and twice a number
- b) The difference of a number and 15
- c) A number subtracted from 29
- d) The quotient of 107 and a number
- e) The product of 15 and a number, added to 12

**Instructions:** In problems 20-24 give the appropriate decimal answer. Show your work.

20. Convert to a decimal      a)  $\frac{2}{5}$

b)  $\frac{1}{3}$

21. Divide      a)  $12.89 \div 100$

b)  $2.05 \div 0.5$

22. Multiply      a)  $(0.897)(1000)$

b)  $0.08 \cdot 0.2$

23. Add       $27 - 5.89$

24. Subtract       $18.1 + 199.01$