

MATH 01 - Arithmetic, Sec. 9767-D10

Second Test. Time allowed: two hours. Professor Luis Fernández

NAME: \_\_\_\_\_

**INSTRUCTIONS:**

- Solve the following exercises.
- **In order to receive credit in any of the exercises YOU MUST SHOW WORK.**
- All the fractions in your answers must be written **in lowest terms**.

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[4] **1.** Write the following mixed numbers as fractions:

a)  $4\frac{3}{4} =$

b)  $2\frac{14}{25} =$

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[4] **2.** Write the following fractions as mixed numbers:

a)  $\frac{23}{4} =$

b)  $\frac{146}{17} =$

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[12] **3.** Multiply:

a)  $\frac{3}{4} \times \frac{5}{7} =$

b)  $\frac{14}{25} \times \frac{10}{21} =$

c)  $3 \times \frac{5}{24} =$

d)  $\frac{25}{36} \times \frac{21}{15} \times \frac{12}{35} =$

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[12] **4.** Divide:

a)  $\frac{3}{5} \div \frac{11}{2} =$

b)  $1\frac{2}{3} \div 2\frac{1}{5} =$

c)  $3 \div \frac{15}{8} =$

d)  $\frac{25}{36} \div 5 =$

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[10] **5.** Find the Greatest Common Factor (GCF) of the following sets of numbers.

a) {72, 48}

b) {72, 36}

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[10] **6.** Find the Least Common Multiple (LCM) of the following sets of numbers. (Remember that finding the LCM is exactly like finding the Least Common Denominator (LCD).)

a) {60, 48}

b) {10, 15, 25}

[18] **7.** Add:

a)  $\frac{3}{15} + \frac{7}{15} =$

b)  $\frac{9}{20} + \frac{7}{15} =$

c)  $3 + \frac{13}{7} =$

d)  $\frac{7}{24} + \frac{7}{20} + \frac{5}{28} =$

e)  $2\frac{3}{4} + 1\frac{2}{3} =$

f)  $234\frac{9}{20} + 331\frac{7}{20} =$

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[18] **8.** Subtract:

a)  $\frac{13}{10} - \frac{7}{10} =$

b)  $\frac{17}{18} - \frac{7}{15} =$

c)  $3 - \frac{3}{10} =$

d)  $\frac{7}{30} - \frac{1}{20} =$

e)  $2\frac{2}{5} - 1\frac{3}{10} =$

f)  $447\frac{9}{24} - 253\frac{5}{24} =$

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[4] **9.** Arrange the following fractions in decreasing order:  $\frac{4}{9}, \frac{5}{8}, \frac{3}{4}$ .  
(You need to show work - no credit for guessing.)

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[12] **10.** Calculate, using the correct order of operations. Do not forget to reduce all fractions to lowest terms.

a)  $\frac{3}{4} + \frac{2}{3} \div \frac{4}{9} =$

b)  $7\frac{1}{2} \div \frac{3}{5} + 1\frac{7}{8} \times 2\frac{2}{5} =$