

EXTRA CREDIT (2 points)

1. Add/Subtract the fractions below

EXAMPLE: $\frac{1}{2} + \frac{2}{3}$

STEP 1: Get a common denominator by finding the least common multiple

2: 2, 4, 6

3: 3, 6

STEP 2: Convert each fraction so they both have the common denominator

$$\frac{1}{2} \times \frac{3}{3} = \frac{3}{6}$$

$$\frac{2}{3} \times \frac{2}{2} = \frac{4}{6}$$

STEP 3: Add the numerators, keep denominator the same

$$\frac{3}{6} + \frac{4}{6} = \frac{7}{6}$$

STEP 4: Reduce and convert to a mixed number

$$7-6=1$$

Answer: $1 \frac{1}{6}$

a. $\frac{5}{6} + \frac{2}{3}$

c. $\frac{3}{4} + \frac{2}{3}$

b. $\frac{7}{10} - \frac{1}{4}$

d. $\frac{5}{8} - \frac{3}{10}$

2. Add/Subtract the mixed numbers below

EXAMPLE: $2 \frac{5}{6} - 1 \frac{3}{4}$

STEP 1: Get a common denominator by finding the least common multiple

6: 6, 12

4: 4, 8, 12

STEP 2: Convert each fraction so they both have the common denominator

$$\frac{5}{6} \times \frac{2}{2} = \frac{10}{12}$$

$$\frac{3}{4} \times \frac{3}{3} = \frac{9}{12}$$

STEP 3: Subtract the fractions and subtract the whole numbers

$$\frac{10}{12} - \frac{9}{12} = \frac{1}{12}$$

$$2-1=1$$

STEP 4: Combine the whole number and fraction, reduce if necessary

Answer: $1 \frac{1}{12}$

a. $3 \frac{1}{2} - 1 \frac{2}{5}$

c. $5 \frac{2}{3} - 3 \frac{1}{4}$

b. $2 \frac{5}{8} + 2 \frac{3}{4}$

d. $10 \frac{9}{10} + 7 \frac{5}{9}$

Name _____ Period _____ Date _____

3. Multiply the fractions below

EXAMPLE: $\frac{5}{6} \times \frac{3}{4}$

STEP 1: Multiply across (numerator X numerator and denominator X denominator)

$$\frac{5}{6} \times \frac{3}{4} = \frac{5 \times 3}{6 \times 4} = \frac{15}{24}$$

STEP 2: Reduce and convert if necessary

$$\frac{15}{24} \div \frac{3}{3} = \frac{5}{8}$$

a. $\frac{1}{3} \times \frac{3}{4}$

c. $\frac{2}{3} \times \frac{6}{7}$

b. $\frac{5}{8} \times \frac{4}{5}$

d. $\frac{8}{9} \times \frac{3}{10}$

4. Multiply the mixed numbers below

EXAMPLE: $2\frac{2}{3} \times 1\frac{3}{4}$

STEP 1: Convert all mixed numbers to improper fractions

How to convert: multiply whole number by denominator, add product to numerator

$$2\frac{1}{3} = 2 \times 3 + 2 = \frac{8}{3}$$

$$1\frac{3}{4} = 1 \times 4 + 3 = \frac{7}{4}$$

STEP 2: Multiply across (numerator X numerator and denominator X denominator)

$$\frac{8}{3} \times \frac{7}{4} = \frac{8 \times 7}{3 \times 4} = \frac{56}{12}$$

STEP 3: Reduce and convert if necessary

$$\frac{56}{12} \div \frac{6}{6} = \frac{9}{2} = 4\frac{1}{2}$$

a. $3\frac{2}{5} \times \frac{1}{3}$

d. $\frac{5}{6} \times 3\frac{1}{2}$

b. $1\frac{1}{2} \times 2\frac{5}{6}$

e. $4\frac{2}{3} \times 3\frac{3}{4}$

c. $4\frac{1}{5} \times 2\frac{2}{3}$

f. $3\frac{5}{8} \times 1\frac{8}{9}$