

ELEMENTARY ALGEBRA
 UNIT 2 - FRACTIONS
 2.2 - ADDITION

NAME _____
 PERIOD _____
 ASSIGNMENT _____

Add:

*1. $\frac{5}{6} + \frac{3}{4}$ { The common denominator is 12 (see back)**

$\frac{10}{12} + \frac{9}{12}$ { Find numerators (see back)**

$\frac{19}{12}$

*2. $4\frac{3}{8}$
 $+2\frac{3}{4}$
 _____ { The common denominator is 8. Find the numerators

$4\frac{3}{8}$
 $+2\frac{6}{8}$
 _____ { Add & simplify
 $\frac{9}{8} = 1\frac{1}{8}$
 $6\frac{9}{8} = 7\frac{1}{8}$

3. $\frac{5}{8} + \frac{1}{8}$

4. $\frac{1}{8} + \frac{3}{4}$

5. $\frac{7}{12} + \frac{5}{6}$

Add:

6. $\frac{4}{5} + \frac{3}{10}$

7. $\frac{2}{3} + \frac{5}{8}$

8. $9\frac{5}{12}$
 $+2\frac{3}{4}$

9. $3\frac{5}{6}$
 $+ \frac{3}{4}$

10. $7\frac{1}{10}$
 $+3\frac{1}{2}$

11. $1\frac{3}{5}$
 $+2\frac{3}{4}$

*1.

*2.

3. $\frac{3}{4}$

4. $\frac{7}{8}$

5. $\frac{17}{12}$

6. $\frac{11}{10}$

7. $\frac{31}{24}$

8. $12\frac{1}{6}$

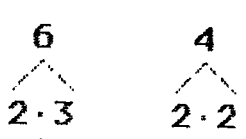
9. $4\frac{7}{12}$

10. $10\frac{3}{5}$

11. $4\frac{7}{20}$

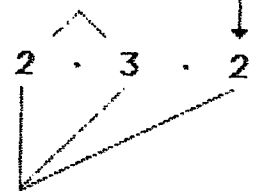
**1. $\frac{5}{6} + \frac{3}{4}$

To find a **common denominator**, find a number that each denominator will divide into evenly



Factor each denominator

The first denominator has factors of 2 & 3, so the **common denominator** needs factors of 2 & 3
The second denominator has factors of 2 & 2, but we already have a 2, so we only need one 2



Choose enough factors from each denominator so that each denominator will divide evenly into the **common denominator**

12 (Common denominator)

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

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

To find the numerators, multiply the top and bottom by whatever it takes to change the bottom to the **common denominator**

ELEMENTARY ALGEBRA
 UNIT 2 - FRACTIONS
 2.3 - SUBTRACTION

NAME _____
 PERIOD ____
 ASSIGNMENT ____

Subtract:

*1. $\frac{5}{6} - \frac{3}{4}$

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

$$\frac{1}{12}$$

*2. $4\frac{3}{8}$
 $-2\frac{3}{4}$

{ The common denominator is 8. Find the numerators.

$$4\frac{3}{8}$$

$$-2\frac{6}{8}$$

{ Borrow
 $4\frac{3}{8} = 3\frac{11}{8}$

$$3\frac{11}{8}$$

$$-2\frac{6}{8}$$

$$1\frac{5}{8}$$

3. $\frac{5}{9} - \frac{2}{9}$

4. $\frac{7}{8} - \frac{3}{4}$

Subtract:

5. $\frac{4}{5} - \frac{3}{10}$

6. $\frac{2}{3} - \frac{5}{8}$

7. $9\frac{5}{12}$

$$-2\frac{3}{4}$$

8. $3\frac{5}{6}$

$$- \frac{3}{4}$$

9. $7\frac{1}{10}$

$$-3\frac{1}{2}$$

10. $3\frac{3}{5}$

$$-2\frac{3}{4}$$

*1.

5. $\frac{1}{2}$

6. $\frac{1}{24}$

*2.

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

8. $3\frac{1}{12}$

9. $3\frac{3}{5}$

3. $\frac{1}{3}$

10. $\frac{17}{20}$

4. $\frac{1}{8}$