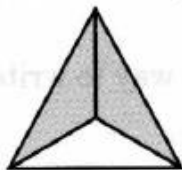


**GRADE 10 ESSENTIAL  
UNIT X – PRIOR STUDIES  
FRACTIONS 1 - 3**

**MrF  
Fractions**

Name: \_\_\_\_\_  
Date: \_\_\_\_\_

**Lesson 1 Writing Fractions**



$\frac{2}{3}$  ← numerator ← number of parts coloured ----- number of parts of the same size ----- numerator →  $\frac{1}{4}$   
 ← denominator ← ----- → denominator →

$\frac{2}{3}$  of the triangle is coloured.

$\frac{1}{4}$  of the square is coloured

Write the fraction that tells how much of each figure is coloured.

1. **a**      **b**   $\frac{3}{4}$   **c**      **d**     

2.                    

Draw a line segment between each fraction and the number word that names the same number.

<p><b>a</b></p> <p>3. one half</p> <p>4. two thirds</p> <p>5. three fourths</p> <p>6. four fifths</p> <p>7. five sixths</p>	<p><math>\frac{4}{5}</math></p> <p><math>\frac{3}{4}</math></p> <p><math>\frac{2}{3}</math></p> <p><math>\frac{1}{2}</math></p> <p><math>\frac{5}{6}</math></p>	<p><b>b</b></p> <p>three eighths</p> <p>four sevenths</p> <p>three sevenths</p> <p>seven eighths</p> <p>seven ninths</p>	<p><math>\frac{7}{9}</math></p> <p><math>\frac{3}{8}</math></p> <p><math>\frac{3}{7}</math></p> <p><math>\frac{4}{7}</math></p> <p><math>\frac{7}{8}</math></p>
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*Note: A blue arrow points from 'one half' to  $\frac{1}{2}$ .*

Write a fraction for each of the following.

a	b
8. numerator 4, denominator 7 _____	three fifths _____
9. numerator 5, denominator 8 _____	two sevenths _____
10. denominator 10, numerator 9 _____	four ninths _____

## Lesson 2 Writing Mixed Numerals

$\frac{13}{4}$  means  $\left\{ \begin{array}{l} 13 \div 4 \\ \text{or} \\ 4 \overline{)13} \end{array} \right.$

$4 \overline{)13} \begin{array}{r} 3 \\ \underline{12} \\ 1 \end{array} \rightarrow 1 \div 4 = \frac{1}{4}$

Mixing whole numbers with fractions

$3\frac{1}{4}$  is a short way to write  $3 + \frac{1}{4}$

$3\frac{1}{4}$  is a mixed numeral.

← "3 and one fourth"

Complete the following.

(3 and one fifth)

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

b  $4\frac{1}{2} = \underline{\quad} + \frac{1}{2}$

c  $3\frac{3}{4} = \underline{\quad} + \underline{\quad}$

d  $9 + \frac{1}{3} = \underline{\quad}$

2.  $4\frac{2}{3} = 4 + \underline{\quad}$

$5\frac{3}{7} = \underline{\quad} + \frac{3}{7}$

$6\frac{2}{5} = \underline{\quad} + \underline{\quad}$


$8 + \frac{7}{8} = \underline{\quad}$

3.  $5\frac{1}{8} = 5 + \underline{\quad}$

$2\frac{1}{6} = \underline{\quad} + \frac{1}{6}$

$3\frac{1}{3} = \underline{\quad} + \underline{\quad}$

$5 + \frac{3}{7} = \underline{\quad}$

$3\frac{1}{3} \rightarrow$    $3\frac{1}{3}$  Pizzas

↳ 3 Whole Pizzas

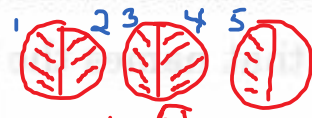
↳ 1 slice of a 3 slice pizza

To really learn you should be doodling!  
Drawing! Manipulating!  
Relate to ideas you know! Pizza!

MrF

Change each fraction to a mixed numeral. (Mixed Fraction)

4.  $\frac{5}{2}$  =  $2\frac{1}{2}$  pizzas   
 5.  $\frac{9}{4}$    
 6.  $\frac{14}{3}$

a  Five half pizzas   
 b  $\frac{9}{5}$  ← Nine slices of a 5 slice pizza!   
 c  $\frac{7}{2}$

$\frac{6}{5}$    
 $\frac{8}{3}$    
 $\frac{10}{3}$    
 $\frac{17}{5}$

Tell whether each of the following is less than 1, equal to 1, or greater than 1.

7.  $\frac{7}{8}$  less than 1 (7 parts out of 8)   
 8.  $\frac{2}{3}$  \_\_\_\_\_  $\frac{12}{12}$  \_\_\_\_\_  $\frac{11}{10}$  \_\_\_\_\_   
 9.  $\frac{1}{9}$  \_\_\_\_\_  $\frac{12}{9}$  \_\_\_\_\_  $\frac{10}{5}$  \_\_\_\_\_

### Lesson 3 Addition (like denominators)

$\frac{2}{5} + \frac{1}{5} = \frac{2+1}{5}$  Add the numerators.   
 $= \frac{3}{5}$  Use the same denominator.

$\frac{3}{10} + \frac{4}{10} + \frac{2}{10} = \frac{3+4+2}{10} = \frac{9}{10}$

If the denominators are the same (same size slice) just add the slices

Add.

$$1. \quad \begin{array}{c} a \\ \frac{3}{5} + \frac{1}{5} = \end{array}$$

$$b \quad \frac{4}{8} + \frac{3}{8} =$$

$$c \quad \frac{2}{7} + \frac{2}{7} =$$

$$2. \quad \frac{3}{6} + \frac{2}{6} =$$

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

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

$$3. \quad \frac{3}{10} + \frac{4}{10} =$$

$$\frac{4}{12} + \frac{1}{12} =$$

$$\frac{5}{11} + \frac{4}{11} =$$

$$4. \quad \begin{array}{c} a \\ \frac{4}{6} \\ + \frac{1}{6} \\ \hline \frac{5}{6} \end{array}$$

$$b \quad \begin{array}{c} \frac{3}{8} \\ + \frac{4}{8} \\ \hline \end{array}$$

$$c \quad \begin{array}{c} \frac{1}{7} \\ + \frac{2}{7} \\ \hline \end{array}$$

$$d \quad \begin{array}{c} \frac{3}{10} \\ + \frac{6}{10} \\ \hline \end{array}$$

$$5. \quad \begin{array}{c} \frac{1}{5} \\ \frac{1}{5} \\ + \frac{1}{5} \\ \hline \end{array}$$

$$\begin{array}{c} \frac{2}{7} \\ \frac{3}{7} \\ + \frac{1}{7} \\ \hline \end{array}$$

$$\begin{array}{c} \frac{2}{8} \\ \frac{1}{8} \\ + \frac{2}{8} \\ \hline \end{array}$$

$$\begin{array}{c} \frac{4}{10} \\ \frac{1}{10} \\ + \frac{2}{10} \\ \hline \end{array}$$

Easy?