FRACTIONS

A. Types of Fractions:

Proper fraction: Numerator is less than denominator

e. g. $\dfrac{2}{3}$ $\dfrac{5}{9}$ $\dfrac{112}{125}$

Improper fraction: Numerator larger than the denominator

e.g. $\dfrac{17}{7}$ $\dfrac{35}{19}$ $\dfrac{512}{425}$

Mixed fraction: Consists of a whole number and a fraction

e. g. $2\dfrac{4}{5}$ $9\dfrac{1}{6}$ $56\dfrac{7}{11}$

EXERCISE A:

Identify which of the following are proper, improper or mixed fractions.

Fraction	Type of fraction	Fraction	Type of fraction
$\dfrac{1}{5}$		$\dfrac{9}{5}$	
$3\dfrac{1}{3}$		$\dfrac{15}{16}$	
$\dfrac{29}{10}$		$5\dfrac{3}{8}$	
$7\dfrac{5}{6}$		$\dfrac{35}{100}$	

B. Equivalent fractions:

Equivalent fractions have the same value when reduced.

e. g. $\dfrac{2}{3} = \dfrac{4}{6}$ $\dfrac{1}{2} = \dfrac{5}{10} = \dfrac{3}{6} = \dfrac{50}{100}$ $\dfrac{4}{5} = \dfrac{8}{10} = \dfrac{12}{15}$

Look at the examples above. What number when multiplied by the first fraction would produce the second fraction?

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

$\dfrac{1 \times 5}{2 \times 5} = \dfrac{5}{10}$ $\dfrac{1 \times 3}{2 \times 3} = \dfrac{3}{6}$ $\dfrac{1 \times 50}{2 \times 50} = \dfrac{50}{100}$

$\dfrac{4 \times 2}{5 \times 2} = \dfrac{8}{10}$ $\dfrac{4 \times 3}{5 \times 3} = \dfrac{12}{15}$

Therefore, each time to produce an equivalent fraction BOTH the numerator and denominator is multiplied by the same number.

EXERCISE B:

Evaluate the missing numbers in each case.

$\dfrac{1}{5} = \dfrac{4}{}$	$\dfrac{2}{7} = \dfrac{}{21}$	$\dfrac{5}{8} = \dfrac{25}{}$	$\dfrac{7}{10} = \dfrac{}{80}$
$\dfrac{2}{3} = \dfrac{16}{}$	$\dfrac{5}{9} = \dfrac{}{72}$	$\dfrac{12}{13} = \dfrac{}{39}$	$\dfrac{8}{11} = \dfrac{88}{}$
$\dfrac{3}{4} = \dfrac{27}{}$	$\dfrac{13}{25} = \dfrac{65}{}$	$\dfrac{11}{20} = \dfrac{}{100}$	$\dfrac{5}{7} = \dfrac{45}{}$
$\dfrac{9}{16} = \dfrac{}{32}$	$\dfrac{3}{10} = \dfrac{36}{}$	$\dfrac{7}{15} = \dfrac{}{75}$	$\dfrac{23}{50} = \dfrac{}{150}$