


MasterMath
Number Sense
 FRACTION - DECIMAL EQUIVALENCY



$\frac{3}{10} = .3$ *Terminating Decimal*
 $\frac{17}{100} = .17$ $\frac{1}{2} = .5$
 $\frac{5}{100} = .05$
 $\frac{323}{1000} = .323$ *Repeating Decimal*
 $\frac{47}{1000} = .047$ $\frac{1}{3}: 1 \div 3 = .53333\dots$
 $\frac{9}{1000} = .009$ $= .\bar{3}$

Fraction - Decimal Equiv

To convert a fraction to a decimal, divide the Numerator by the Denominator.

Terminating Decimal *Repeating Decimal*
 $\frac{1}{5}: 1 \div 5 = .2$ $\frac{1}{9}: 1 \div 9 = .\bar{1}$
 $\frac{3}{8}: 3 \div 8 = .375$ $\frac{1}{3}: 1 \div 3 = .\bar{3}$

Fraction - Decimal Equiv

To convert a mixed number to a decimal, convert the fraction in the mixed number to a decimal, and then put the whole number in front of it.

$$\frac{1}{2}$$

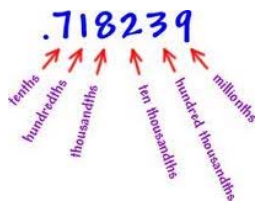
$$1.5$$

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



Fraction – Decimal Equiv

To convert a Terminating decimal to a fraction,

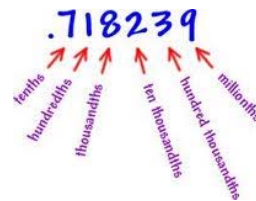


Write the digits of the decimal as the numerator. Use the place value of the last digit of the decimal as the denominator.

$$.25 \rightarrow \frac{25}{100} = \frac{1}{4}$$

Fraction – Decimal Equiv

To convert a Terminating decimal to a fraction,



Write the digits of the decimal as the numerator. Use the place value of the last digit of the decimal as the denominator.

$$1.75$$

$$1\frac{3}{4}$$

$$.75 \rightarrow \frac{75}{100} = \frac{3}{4}$$

Fraction – Decimal Equiv

You try it!

Convert $\frac{3}{5}$ to a decimal

FRACTION - DECIMAL EQUIVALENT 

You try it!

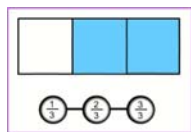
Convert $\frac{3}{5}$ to a decimal

$$\frac{3}{5} : 3 \div 5 = .6$$

FRACTION - DECIMAL EQUIVALENT 

You try it!

Convert $\frac{2}{3}$ to a decimal

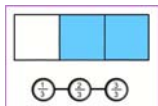


FRACTION - DECIMAL EQUIVALENT 

You try it!

Convert $\frac{2}{3}$ to a decimal

$$\frac{2}{3} = 2 \div 3 = .\bar{6}$$



FRACTION - DECIMAL EQUIVALENT

You try it!

Convert $\frac{1}{8}$ to a decimal



FRACTION - DECIMAL EQUIVALENT

You try it!

Convert $\frac{7}{8}$ to a decimal

$$\frac{7}{8}$$

$$1.875$$

$$\frac{7}{8} = 7 \div 8 = .875$$

FRACTION - DECIMAL EQUIVALENT

You try it!

Convert .36 to a fraction

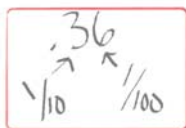
FRACTION - DECIMAL EQUIVALENT

You try it!

Convert .36 to a fraction

.36

$$\frac{36}{100} = \frac{18}{50} = \frac{9}{25}$$



FRACTION - DECIMAL EQUIVALENT

You try it!

I reach into my pocket and pull out the following change. Write in standard form how much money I have.



FRACTION - DECIMAL EQUIVALENT

You try it!

I reach into my pocket and pull out the following change. Write in standard form how much money I have.



$$1 + 1 + \frac{1}{4} + \frac{1}{10} + \frac{1}{10} =$$

$$1 + 1 + .25 + .1 + .1 = \$2.45$$

FRACTION - DECIMAL EQUIVALENCY

You try it!

The basketball game lasted 2.44 hours. Convert the length to a mixed number, and simplify.

FRACTION - DECIMAL EQUIVALENCY

You try it!

The basketball game lasted 2.44 hours. Convert the length to a mixed number, and simplify.

$$2.44$$

.44	44
$\frac{1}{10}$	$\frac{1}{100}$

$$2 \frac{44}{100} = 2 \frac{22}{50} = 2 \frac{11}{25}$$

FRACTION - DECIMAL EQUIVALENCY
