

How can we write a decimal as a fraction?

a decimal as a fraction simply write it exactly the way that it.

Keep in mind place value.

	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	Decimal Point (AND)	Tenths	Hundredths	Thousandths	Ten Thousandths	Hundred Thousandths
	3	4	2	8	5	•		7	2	9	6	1

Example	Decimal in Words	Fraction
24	24 hundredths	$\frac{24}{100}$
.4	4 tenths	$\frac{4}{10}$
23	23 thousandths	$\frac{23}{1000}$
78	78 hundredths	$\frac{78}{100}$

How to Convert Fractions to Decimals

Remember that a fraction bar represents division. To convert a fraction to an equivalent decimal you must divide the numerator by the denominator. That is, the top number by the bottom number.

numerator
denominator

Example: $\frac{7}{8} = \text{divisor} \overline{) \text{dividend}}$

$$\begin{array}{r} 0.875 \\ 8 \overline{) 7.000} \\ \underline{-64} \\ 60 \\ \underline{-56} \\ 40 \end{array}$$

Homework - Show work on page 28

Directions:

Compare the following fractions using $<$, $>$, or $=$.

1) $\frac{6}{7} < \frac{10}{11}$ <i>66, 100, "bu"</i>	2) $\frac{3}{15} < \frac{5}{8}$ <i>75, 15, 75</i>	3) $\frac{4}{8} = \frac{2}{4}$ <i>16, 16, bottoms up</i>
4) $\frac{1}{3} > \frac{0.19}{100}$ <i>100, 57, 19, 100, 19, 57</i>	5) $\frac{1}{5} > 0.15$ <i>100, 15, 100, 15, 75</i>	6) $2.5 > 2\frac{1}{2}$ <i>2, 10, 2, 10, 2, 10</i>

Directions: Order the following values from least to greatest.

- 7) 0.294, 0.87, 0.209, 0.22 *0.209, 0.22, 0.294, 0.87*

Directions: Fill in the missing part of the table.

Decimal	Decimal in Words	Fraction
8) 0.28	28 hundredths	$\frac{28}{100}$
9) 3.2	3 and 2 tenths	$3\frac{2}{10}$
10) 0.62	62 hundredths	$\frac{62}{100}$

Directions: Evaluate each algebraic expression where $a = 4$, $b = -5$, and $c = -2$. Show work in your notebook on page 28.

- 11) $3a - 5b$ 12) $a(b + c)$ 13) $c - 9a + b$

Directions: Convert each fraction to a decimal. Show work in your notebook on page 28.

- 14) $\frac{2}{5}$ 15) $-\frac{8}{25}$ 16) $3\frac{1}{4}$

Quiz 4 on Wednesday

HW: Comparing 10/1
 & Converting Rational #s

$$\begin{array}{r}
 11) \quad 3a - 5b \\
 3(4) - 5(-5) \\
 12 + 25 \\
 \hline
 37
 \end{array}$$

$$\begin{array}{r}
 15.) \quad -\frac{8}{25} = -0.32 \\
 \quad 0.32 \quad 32 \\
 25 \overline{) 8.00} \quad \leftarrow \text{hundredths} \\
 \underline{-75} \\
 50 \\
 \underline{-50} \\
 0
 \end{array}$$

$$\begin{array}{r}
 12.) \quad a(b+c) \\
 4(-5-2) \\
 4(-7) \\
 \hline
 -28
 \end{array}$$

$$16.) \quad 3\frac{1}{4} = 3.25$$

$$\begin{array}{r}
 13.) \quad c - 9a + b \\
 -2 - 9(4) + (-5) \\
 -2 - 36 - 5 \\
 \quad \text{same +} \\
 \hline
 -38 - 5 \\
 \quad \text{same +} \\
 \hline
 -43
 \end{array}$$

$$\begin{array}{r}
 \quad 0.25 \\
 4 \overline{) 1.0} \\
 \underline{-8} \\
 20 \\
 \underline{-20} \\
 0
 \end{array}$$

$$\begin{array}{r}
 14.) \quad \frac{2}{5} \\
 \quad 0.4 \\
 5 \overline{) 2.0} \quad \leftarrow \text{4 tenths} \\
 \underline{-20} \\
 0 \\
 \hline
 \frac{2}{5} = 0.4
 \end{array}$$