"I Can Convert Fractions to Decimals and Decimals to Fractions."

Converting Fractions to Decimals

When you say, "Eight Tenths" what two number forms come to mind? _____ _____

We can use equivalent fractions to convert fractions to decimals if we can change the denominator to a multiple of 10.

$\frac{7}{20} = \frac{\quad}{100} =$ _____	$\frac{16}{250} = \frac{\quad}{1000} =$ _____	$\frac{3}{5} = \frac{\quad}{10} =$ _____
$\frac{17}{25} = \frac{\quad}{\quad} =$ _____	$\frac{111}{200} = \frac{\quad}{\quad} =$ _____	$\frac{49}{50} = \frac{\quad}{\quad} =$ _____

Fractions where it's not easy to convert the denominator to a multiple of 10, DIVIDE

$\frac{5}{8}$	$\frac{7}{12}$	$3\frac{2}{7}$

Convert the following decimals to fractions and then simplify the fractions.

0.7 = _____	0.75 = _____	0.125 = _____
1.08 = _____	7.98 = _____	8.625 = _____

"I Can Convert Fractions to Decimals and Decimals to Fractions."

Converting Fractions to Decimals

When you say, "Eight Tenths" what two number forms come to mind? $\frac{8}{10}$ 0.8

We can use equivalent fractions to convert fractions to decimals if we can change the denominator to a multiple of 10.

$\frac{7}{20} = \frac{35}{100} =$ 0.35 (×5, ×5)	$\frac{16}{250} = \frac{64}{1000} =$ 0.064 (×4, ×4)	$\frac{3}{5} = \frac{6}{10} =$ 0.6 (×2, ×2)
$\frac{17}{25} = \frac{58}{100} =$ 0.58 (×4, ×4)	$\frac{111}{200} = \frac{555}{1000} =$ 0.555 (×5, ×5)	$\frac{49}{50} = \frac{98}{100} =$ 0.98 (×2, ×2)

Fractions where it's not easy to convert the denominator to a multiple of 10, DIVIDE

$\frac{5}{8}$

$$
\begin{array}{r|l}
8 & 0.625 \\
\hline
5.000 & \\
-0 & \\
\hline
50 & \\
-48 & \\
\hline
20 & \\
-16 & \\
\hline
40 & \\
-40 & \\
\hline
0 &
\end{array}
$$

$\frac{7}{12}$

$$
\begin{array}{r|l}
12 & 0.583\ldots \\
\hline
7.000 & \\
-0 & \\
\hline
70 & \\
-60 & \\
\hline
100 & \\
-96 & \\
\hline
40 & \\
-36 & \\
\hline
4 &
\end{array}
$$

$3\frac{2}{7}$ $\frac{23}{7}$

$$
\begin{array}{r|l}
7 & 3.285\ldots \\
\hline
23.000 & \\
-0 & \\
\hline
23 & \\
-21 & \\
\hline
20 & \\
-14 & \\
\hline
60 & \\
-56 & \\
\hline
40 & \\
-35 & \\
\hline
5 &
\end{array}
$$

Convert the following decimals to fractions and then simplify the fractions.

0.7 = $\frac{7}{10}$	0.75 = $\frac{75 \div 25}{100 \div 25} = \frac{3}{4}$	0.125 = $\frac{125 \div 125}{1000 \div 125} = \frac{1}{8}$
1.08 = $1\frac{8 \div 4}{100 \div 4} = 1\frac{2}{25}$	7.98 = $7\frac{98 \div 2}{100 \div 2} = 7\frac{49}{50}$	8.625 = $8\frac{625 \div 125}{1000 \div 125} = 8\frac{5}{8}$