

The next set here are harder because the decimal conversions are not so short and simple. However, in some cases they can be simplified if you think about equivalent fractions.

Take a look:

Quick Conversion	Use your recall of quick conversions, counting, and multiplication to convert these new fractions!		
Unit Fraction	Decimal:	New Fraction:	Decimal Conversion (words and equations)
$\frac{1}{8}$	0.125	$\frac{2}{8}$	2/8 is equivalent to $\frac{1}{4}$ Therefore, $2/8 = 0.25$
$\frac{1}{8}$	0.125	$\frac{3}{8}$	No equivalent fraction. Three eighths are the same as: $3 \times 0.125 = 0.375$
$\frac{1}{16}$	0.0625	$\frac{4}{16}$	$\frac{4}{16} = \frac{1}{4}$ So: $\frac{4}{16} = 0.25$
$\frac{1}{8}$	0.125	$\frac{4}{8}$	$\frac{4}{8} = \frac{1}{2}$ So: $\frac{4}{8} = 0.5$
$\frac{1}{12}$	0.08 $\bar{3}$	$\frac{3}{12}$	$\frac{3}{12} = \frac{1}{4}$ So: $\frac{3}{12} = 0.25$
$\frac{1}{6}$	0.1 $\bar{6}$	$\frac{3}{6}$	So: $\frac{3}{6} = \frac{1}{2}$ $\frac{3}{6} = 0.5$
Number Line:			
Record each fraction and decimal between the unit fraction and the new fraction			

FRACTION TO DECIMAL CONVERSION EXTENSIONS:

Name: _____

Quick Conversion		Use your recall of quick conversions, counting, and multiplication to convert these new fractions!	
Unit Fraction	Decimal:	New Fraction:	Decimal Conversion (words and equations)
$\frac{1}{2}$	0.5	$\frac{5}{2}$	5 halves are the same as... $5 \times 0.5 = 2.5$
$\frac{1}{10}$	0.1	$\frac{3}{10}$	$3 \times 0.1 = 0.3$
$\frac{1}{100}$	0.01	$\frac{6}{100}$	$6 \times 0.01 = 0.06$
$\frac{1}{3}$	$0.\overline{3}$	$\frac{2}{3}$	$2 \times 0.\overline{3} = 0.\overline{6}$
$\frac{1}{4}$	0.25	$\frac{7}{4}$	$7 \times 0.25 = 1.75$
$\frac{1}{5}$	0.2	$\frac{3}{5}$	$3 \times 0.2 = 0.6$
$\frac{1}{9}$	$0.\overline{1}$	$\frac{5}{9}$	$5 \times 0.\overline{1} = 0.\overline{5}$

Number Line:	
Record each fraction and decimal between the unit fraction and the new fraction	

Think: can I find a simpler equivalent fraction?

Quick Conversion		Use your recall of quick conversions, counting, and multiplication to convert these new fractions!	
Unit Fraction	Decimal:	New Fraction:	Decimal Conversion (words and equations)
$\frac{1}{16}$	0.0625	$\frac{4}{16}$	$\frac{4}{16} = \frac{1}{4}$ So: $\frac{4}{16} = 0.25$
$\frac{1}{8}$	0.125	$\frac{7}{8}$	$7 \times 0.125 =$ $0.7 + 0.14 + 0.035 = 0.875$
$\frac{1}{12}$	0.08 $\bar{3}$	$\frac{4}{12}$	$\frac{4}{12} = \frac{1}{3}$ $\frac{4}{12} = 0.\bar{3}$
$\frac{1}{8}$	0.125	$\frac{6}{8}$	$\frac{6}{8} = \frac{3}{4}$ So: $\frac{6}{8} = 0.75$
$\frac{1}{12}$	0.08 $\bar{3}$	$\frac{6}{12}$	$\frac{6}{12} = \frac{1}{2}$ $\frac{6}{12} = 0.5$
$\frac{1}{6}$	0.1 $\bar{6}$	$\frac{2}{6}$	$\frac{2}{6} = \frac{1}{3}$ $\frac{2}{6} = 0.\bar{3}$
$\frac{1}{7}$	0.142857	$\frac{4}{7}$	$4 \times 0.142857 =$ $= 0.5714285$

Number Line:

Record each fraction and decimal between the unit fraction and the new fraction



