Name _____ Date _____

Fractions as Decimals

Example

$\frac{3}{5} = \frac{3 \cdot 2}{5 \cdot 2} = \frac{6}{10} = 0.6 \quad \frac{3}{4} = \frac{3 \cdot 25}{4 \cdot 25} = \frac{75}{100} = 0.75$

We expand the fraction so that the denominator is 10, 100 or 1000. Then it is easy to write as a decimal.

Remember

$\frac{6}{10} = 0.6$ (six tenths), $\frac{75}{100} = 0.75$ (seventy-five hundredths), $\frac{125}{1000} = 0.125$

1 ON YOUR OWN Expand to a denominator of 10, 100 or 1000 and write as a decimal.

$\frac{1}{2} = \frac{\square}{10} = \square$ $\frac{2}{5} = \frac{\square}{10} = \square$

$\frac{4}{5} = \frac{\square}{10} = \square$ $\frac{1}{5} = \frac{\square}{10} = \square$

$\frac{1}{4} = \frac{\square}{100} = \square$ $\frac{3}{4} = \frac{\square}{100} = \square$

$\frac{7}{20} = \frac{\square}{100} = \square$ $\frac{9}{25} = \frac{\square}{100} = \square$

$\frac{3}{50} = \frac{\square}{100} = \square$ $\frac{1}{8} = \frac{\square}{1000} = \square$

$\frac{3}{8} = \frac{\square}{1000} = \square$ $\frac{7}{8} = \frac{\square}{1000} = \square$

Names (pair) _____ Date _____

2 ON YOUR OWN Mixed numbers: the whole part stays in front of the decimal point.

$2\frac{1}{2} =$ ☐ $1\frac{3}{4} =$ ☐ $3\frac{2}{5} =$ ☐

3 IN PAIRS **To 10 or to 100?** One student says what to expand by, the other writes the decimal. Swap roles in every row.

Fraction	Expand by	New fraction	Decimal
$\frac{3}{5}$	☐	$\frac{\square}{\square}$	☐
$\frac{9}{20}$	☐	$\frac{\square}{\square}$	☐
$\frac{5}{8}$	☐	$\frac{\square}{\square}$	☐
$\frac{11}{25}$	☐	$\frac{\square}{\square}$	☐
$\frac{1}{2}$	☐	$\frac{\square}{\square}$	☐
$\frac{7}{4}$	☐	$\frac{\square}{\square}$	☐

4 ON YOUR OWN Mark the numbers on the line and write them above the dots.

$\frac{1}{2}$ 0.3 $\frac{4}{5}$ $1\frac{1}{5}$ 1.7

