

## 7.2 Relate Fractions and Decimals

Fractions and mixed numbers with denominators that are powers of 10 can be easily renamed as decimals.

Use the word name to translate between the fraction form and the decimal form.

Fraction or Mixed Number	Word Name	Decimal
$1 \frac{7}{10}$	one <u>and seven tenths</u> <i>decimal point</i> <i>1 decimal place</i>	1.7
$3 \frac{9}{100}$	three <u>and nine hundredths</u> <i>2 decimal places</i>	3.09
$\frac{41}{1000}$	forty-one <u>thousandths</u> <i>3 decimal places</i>	0.041

**Example:** Write the word name. Then write the equivalent decimal or fraction.

1.)  $\frac{9}{10}$  *nine tenths*

*0.9*

2.)  $\frac{81}{1000}$  *eighty-one thousandths*

*0.081*

3.) 0.87 *eighty-seven hundredths*

*$\frac{87}{100}$*

4.) 0.0563 *five hundred sixty-three ten-thousandths*

*$\frac{563}{10000}$*

**Example:** Write the equivalent decimal or fraction.

5.) 0.121

$$\frac{121}{1000}$$

6.)  $\frac{2}{1000}$

$$0.\underline{0}\underline{0}\underline{2}$$

7.)  $\frac{71}{10,000}$

$$0.\underline{0}\underline{0}\underline{7}\underline{1}$$

8.) 0.1578

$$\frac{1578}{10000}$$

**Example:** Write the equivalent decimal or fraction.

9.)  $\frac{68}{100}$

$$0.\underline{6}\underline{8}$$

10.) 0.101

$$\frac{101}{1000}$$

11.)  $10\frac{3}{1000}$

$$10.\underline{0}\underline{0}\underline{3}$$

12.) 3.045

$$3\frac{45}{1000}$$