4.NF.6   Fractions as decimals

I can...understand how decimals and fractions can be equal, with denominators of 10 & 100.

LINGO

decimal
A number with one or more digits to the right side of a decimal point.

3.076   24.89   13.421

tenths
Fraction represented as a decimal, to show parts of a whole.

fraction: $\frac{7}{10}$ decimal: $.7$ word form: **seven-tenths**

Tip: When there is ONE zero in the denominator, there must be ONE number after the decimal.

hundredths
Fraction represented as a decimal, to show parts of a whole.

fraction: $\frac{7}{100}$ decimal: $.07$ word form: **seven-hundredths**

Tip: When there are TWO zeros in the denominator, there must be TWO numbers after the decimal.

Place Value of Decimals

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones		Tenths	Hundredths
							●		
							●		
							●		

Word Form

When a number is expressed in word form, look for the word **tenths** or **hundredths**.
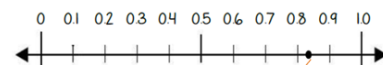
five-tenths   eight-hundredths

$\frac{5}{10} = .5$ $\frac{8}{100} = .08$

Decimals on a number line

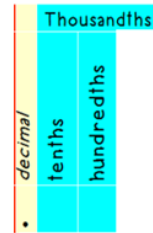You can place decimals on a number line. To place .83, place it between .8 and .9

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
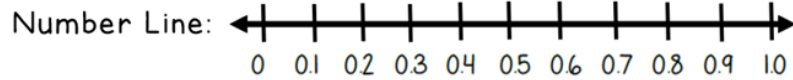
$\frac{83}{100}$ $.83$

Eighty three-hundredths
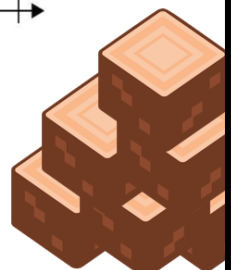
PRACTICE

Write $\frac{7}{100}$ as a decimal: _____

Written Form: _____

Number Line:

```
←——+——+——+——+——+——+——+——+——+——+——→
   0  0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
```

Shade:

decimal	tenths	hundredths
		Thousandths

Write $\frac{35}{100}$ as a decimal: _____

Written Form: _____

Number Line:

```
←——+——+——+——+——+——+——+——+——+——+——→
   0  0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
```

Shade:

decimal	tenths	hundredths
		Thousandths
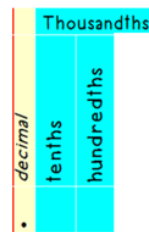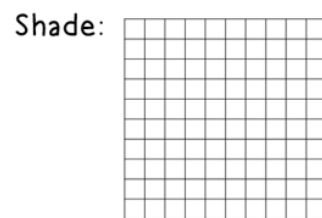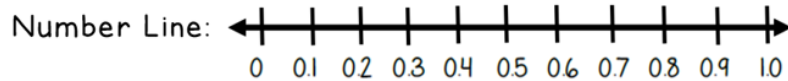
Write 0.59 as a *fraction*: _____

Written Form: _____

Number Line:

```
←——+——+——+——+——+——+——+——+——+——+——→
   0  0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
```

Shade:

decimal	tenths	hundredths
		Thousandths