

Name \_\_\_\_\_

## Rational and Irrational Numbers Guided Notes

A rational number is a number that can be written as a ratio.

Fractions are a type of ratio that is a comparison of a part to a whole.

When rational numbers are written as decimals, they are either repeating or terminating.  
(pattern) (they end)

Irrational numbers cannot be written as a ratio and when written as decimals, they are non-repeating and non-terminating (never end)

Fractions, decimals, and percents are all different forms used to write the same rational number.

Any fraction can be expressed as a decimal. Some fractions equal repeating decimals and some equal terminating decimals.

All terminating and repeating decimals can also be written in ratio form, so they are all rational numbers.

Fractions can also be written as percents. All percents can be written in fraction form, so all percents are rational numbers.

If decimals do not repeat or terminate, they are irrational numbers.