* To convert a fraction to a decimal, divide the numerator by the denominator.

\_Numerator\_ 3

Denominator 4

* 0.75 is a terminating decimal because the division ends, or terminates when the remainder is zero.

1

3

* 0.3 is a repeating or non-terminating decimal. Use bar notation to show that the 3 repeats
* Read the decimal using place value.
  + Ex.) 0.6 is read “six-tenths” =
* Write the decimal over the place value
  + Ex.) 0.35
  + Ex.) 0.125
  + Ex.) 0.2
* Simplify the Fraction by using the Greatest Common Factor (GCF)

3\_

12

Factors of 3:

Factors of 12:

When the *entire* number after the decimal point is repeating:

* **Numerator:** use the decimal number
* **Denominator**: Add a 9 for every number under the repeating bar

Ex.) 0.3 0.367

0.25

When *only part* of the number after the decimal point is repeating:

* **Numerator**: subtract the number(s) NOT under the repeating bar from the entire decimal
* **Denominator**: Add a 9 for every number under the repeating bar followed by a 0 for every number that is NOT under the repeating bar.

Ex.) 0.45 Numerator: 45 – 4 = 41

Denominator: 90

0.217

0.345