



## Vocabulary: Percents, Fractions, and Decimals



### Vocabulary

- **Decimal** – a number written in the base-10 system.
  - Usually “decimal” refers to a number that contains a *decimal point*.
  - A *repeating decimal* has a certain digit or group of digits that repeat forever. There are two ways to write repeating decimals.
    - Using three dots as in 0.333... (the 3 repeats) and 0.454545... (the 45 repeats).
    - Using bar notation as in  $0.\overline{3}$  (the 3 repeats) and  $0.\overline{45}$  (the 45 repeats).
  - A *terminating decimal* has a specific number of digits. For example, 0.6, 0.79, and 0.387 are terminating decimals.
- **Equivalent** – equal in value.
  - For example,  $\frac{1}{2}$  is equivalent to 0.5 and 50% because all three quantities mean one half.
- **Fraction** – a number that shows the relationship between a part and a whole.
  - A fraction consists of a *denominator* (bottom number) and a *numerator* (top number).
  - A fraction is in *simplest form* when 1 is the only common factor of the numerator and denominator. For example,  $\frac{1}{4}$  is the simplest form of  $\frac{2}{8}$ .
- **Percent** – a ratio of a number to 100.
  - For example, 39% means 39 out of 100.
- **Ratio** – a comparison between two things by division.
  - For example, suppose there are 3 goldfish in a tank of 5 fish total. The ratio of goldfish to total fish can be written as 3 to 5, 3:5, or  $\frac{3}{5}$ .

