

Notes #7 – Ratios, Unit Rates, Unit Pricing, Equivalent Ratios

Ratio compares 2 numbers. Ratios can be written 3 different ways (to, :, fraction bar)

Ex:

Equivalent or Simplifying Ratios is similar to fractions. You can multiply or divide both numbers by the same value.

Ex:

Unit Rates and Unit Pricing compare 2 numbers with different units of measure. To find how much 1 item will cost you divide and write the 2 units of measure in your answer.

Ex: \$1.29 for 3 pounds. How much per pound?

Ex: 54 miles with 2 gallons. How many miles per gallon?

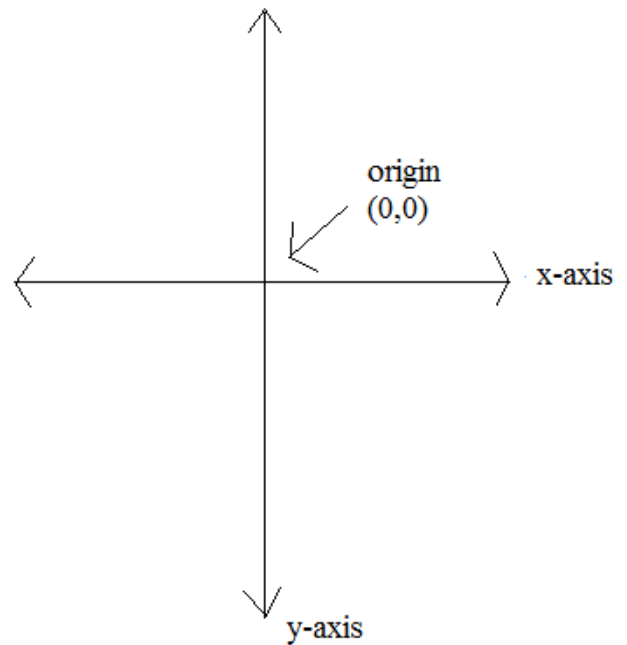
Ex: Which is the better buy...8 oz for \$1.29 or 5 oz for \$0.89

Ex:

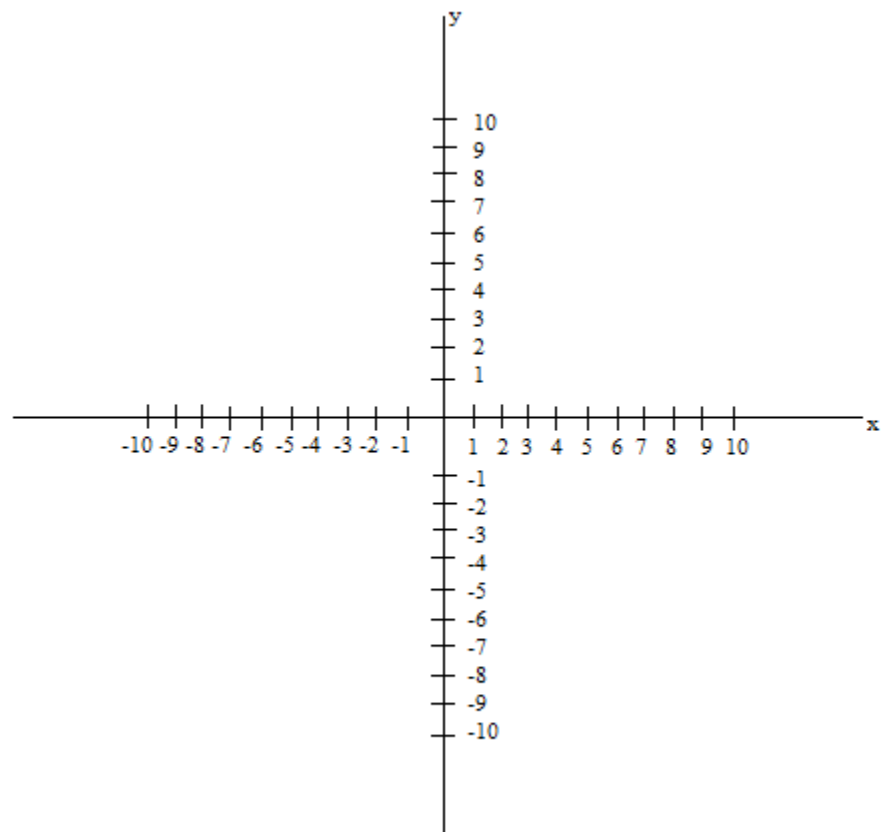
Miles		135		225	
Hours	1	3	4	5	9

Notes # 8 - Graphing Points

Coordinate plane is a graph with a x-axis (horizontal) and a y-axis (vertical). The graph has 4 quadrants.



Origin is where the x-axis and y-axis intersect. It is the starting point. The ordered pair is (0,0). Ordered pair tells you where to place the point. It is always in the form of (x,y). The x value means to move along the x-axis (which means to over to the left or right). The y value means to move along the y-axis (↑ or ↓).



Notes # 9 - Fractions, Decimals, Percents

Fraction to Decimal

1. \div numerator by denominator (B.O bottom outside $\overline{) \quad}$)
2. Add decimal and zeroes as needed.

Ex:

Decimal to Fraction

1. Number behind the decimal is the numerator.
2. Last place value used is the denominator.
3. Simplify if possible.

Ex:

Percent to Fraction

1. Put percent number as the numerator
2. Denominator is always 100
3. Simplify if possible.

Ex:

Fraction to Percent

1. Divide numerator by denominator (B.O—bottom outside)
2. Add decimal and zeroes as needed.
3. Move decimal 2 places to the right.
4. Add % sign.

Ex:

Decimal to Percent

1. Move decimal 2 places to the right.
2. Add % sign.

Ex:

Percent to Decimal

1. Move decimal 2 places to the left.
2. Drop % sign.

Ex:

Notes #10 - Percent of a Number

Steps

1. Change percent to a decimal.
*move 2 places to the left and drop % sign
2. Change “of” to multiplication.
3. Multiply. Remember to put the decimal in your answer

Ex:

Notes #11 – Proportions

Proportions show that two ratios (or fractions) are equal.

Ex:

In a proportion the cross products are equal. Cross products can be found by multiplying diagonally.

Ex:

Solve for a missing value

1. Copy the problem
2. Find the cross products (multiply diagonally)
3. Write the 2 cross products as an equation (using an = sign)
4. Use the inverse operation by dividing on both sides. Solve one side and cancel out the other side.

Ex: