

VOCABULARY

EIGHTH GRADE MATH

MODULE FOUR

LINEAR EQUATIONS

Coefficient: A number used to multiply a variable. Example: $6z$ means 6 times z , and " z " is a variable, so 6 is a coefficient.

Equation: An equation is a statement about equality between two expressions. If the expression on the left side of the equal sign has the same value as the expression on the right side of the equal sign, then you have a true equation.

Like Terms: Terms whose variables and their exponents are the same. Example: $7x$ and $2x$ are like terms because the variables are both " x ". But $7x$ and $7x^2$ are NOT like terms because the x 's don't have the same exponent.

Linear Expression: An expression that contains a variable raised to the first power

Solution: A solution of a linear equation in x is a number, such that when all instances of x are replaced with the number, the left side will equal the right side.

Term: In Algebra a term is either a single number or variable, or numbers and variables multiplied together. Terms are separated by $+$ or $-$ signs

Unit Rate: A **unit rate** describes how many **units** of the first type of quantity correspond to one **unit** of the second type of quantity. Some common **unit rates** are miles per hour, cost per item & earnings per week

Variable: A symbol for a number we don't know yet. It is usually a letter like x or y . Example: in $x + 2 = 6$, x is the variable.

Average Speed: Average speed is found by taking the total distance traveled in a given time interval, divided by the time interval. If y is the total distance traveled in a given time interval x , then y/x is the average speed

Constant Speed: When the **speed** of an object remains the same; it does not increase or decrease

Horizontal Line: In a Cartesian plane, a horizontal line is either the x -axis or any other line parallel to the x -axis.

Linear Equation: An equation in which both expressions are linear expressions.

Point-Slope Equation of a Line: In point-slope form, y_1 is the y value of the known point on the line, m is the slope and x_1 is the x value of the known point.

Slope of a Line in a Cartesian Plane: Slope is a number that can be used to describe the steepness of a line in a coordinate plane. The slope of a line is often represented by the symbol m .

Slope-Intercept Equation of a Line: When the equation is written as $y = mx + b$. The **slope** is the number "m" that is multiplied on the x , and "b" is the **y-intercept**, where the line crosses the y -axis.

Solution to a System of Linear Equations: A solution to a system of two linear equations in two variables is an ordered pair of numbers that is a solution to both equations

Standard Form of a Linear Equation: A linear equation in two variables x and y is in standard form if it is of the form $ax + by = c$ for real numbers a , b , and c , where a and b are both not zero. The numbers a , b , and c are called constants.

System of Linear Equations: A system of linear equations is a set of two or more linear equations.

Vertical Line: In a Cartesian plane, a vertical line is either the y -axis or any other line parallel to the y -axis.

X-Intercept: An x -intercept of a graph is the x -coordinate of a point where the graph intersects the x -axis. An x -intercept point is the coordinate point where the graph intersects the x -axis.

Y-Intercept: A y -intercept of a graph is the y -coordinate of a point where the graph intersects the y -axis. A y -intercept point is the coordinate point where the graph intersects the y -axis.

Eighth Grade – Module Four

Name:

Vocabulary Activity

TERM	EXAMPLE	NON-EXAMPLE
Coefficient		
Equation		
Like Terms		
Linear Expression		
Solution		
Term		
Unit Rate		
Variable		

Average Speed		
Constant Speed		
Horizontal Line		
Linear Equation		
Point-Slope Equation of a Line		
Slope of a Line in a Cartesian Plane		
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System of Linear Equations		
Vertical Line		
X-Intercept		
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