MATH: UNIT VOCABULARY One-Step Equations and Inequalities

NAME:_____



CHART

TERM	INFORMATION	PICTURE
Addition Property of Equality	Adding the same number to each side of an equation produces an equivalent expression.	2-1Solving Equations by Adding or SubtractingProperties of Equality WORDSAddition Property of Equality You can add the same number to both sides of an equation, and the statement will still be true.NUMBERS $3 = 3$ $3 + 2 = 3 + 2$ $5 = 5$ ALGEBRA $a = b$ $a + c = b + c$
Constant of proportionality	The constant value of the ratio of two proportional quantities x and y; usually written y = kx, where k is the constant of proportionality (coefficient). In a proportional relationship, y = kx, k is the constant of proportionality (coefficient), which is the value of the ratio between y and x.	y = kx y = 3x constant of proportionality
Dependent variable	A variable that depends on other factors. For example, a test score could be a dependent variable because it could change depending on several factors such as how much you studied, how much sleep you got the night before you took the test, or even how hungry you were when you took it.	Dependent variable – The amount of money raised depends on the number of cars washed. y represents the total revenue earned. y represents the number of cars. y represents the number of cars.

Direct Proportion (Direct Variation)	The relation between two quantities whose ratio remains constant. When one variable increases the other increases proportionally: When one variable doubles the other doubles, when one variable triples the other triples, and so on. When A changes by some factor, then B changes by the same factor: A=kB, where k is the constant of proportionality.	A = kB
Division	States that when both sides	2-2 Solving Equations by Multiplying or Dividing
Property of Equality	of an equation are divided by the same number, the	Properties of Equality
2400.009	remaining expressions are still equal.	WORDS You can divide both sides of an equation by the same nonzero number, and the statement will still be true.
		NUMBERS $\begin{array}{r} 8 &= 8\\ \frac{8}{4} = \frac{8}{4}\\ 2 &= 2 \end{array}$
		$a = b$ ALGEBRA $(c \neq 0)$ $\frac{a}{c} = \frac{a}{c}$ Holt Algebra 1. Copyright o by Holt, Rinehart and Winston, All Rights Reserved.
Equation	A mathematical sentence that contains an equal sign.	Variable Constants x + 23 = 45 Equal sign, or fulcrum
Independent variable	A variable that stands alone and isn't changed by the other variables you are trying to measure. For example, someone's age might be an independent variable.	Dependent variable – Independent variable – the number of cars washed The amount of money raised depends on the number of cars washed. $y = 10x$ y represents the total revenue earned. x represents the number of cars.
Inequality	A mathematical sentence that contains the symbols >,	$x > -21 \qquad x \le -3 \qquad x \ge 5 \qquad x < 7$
		-21 -3 5 /

Inverse Operation	A mathematical process that combines two or more numbers such that its product or sum equals the identity.	Inverse operations operation + - * ÷ Inverse - + ÷ × exconverse
Multiplication Property of Equality	States that when both sides of an equation are multiplied by the same number, the remaining expressions are still equal.	Solving Equations by Multiplying or DividingProperties of Equality wordsMonodationMultiplication Property of Equality You can multiply both sides of an equation by the same number, and the statement will still be true.Mumbers $6 = 6$ $6(3) = 6(3)$ $18 = 18$ $a = b$ $aC = bC$ Mumbers $a = b$ $aC = bC$
Properties of Equality	A relationship between two quantities or, more generally two mathematical expressio ns, asserting that the quantities have the same value or that the expressions represent the same mathematical object.	 Properties of Equality Addition: If a = b then a + c = b + c. Subtraction: If a = b then a - c = b - c. Multiplication: If a = b then ac = bc. Division: If a = b and c ≠ 0 then a/c = b/c
Proportion	An equation which states that two ratios are equal.	$\frac{4}{8} = \frac{1}{2}$ or $4:8=1:2$
Solution	The set of all values which, when substituted for unknowns, make an equation true.	2x+4(-4) = -10 $2x-16 = -10$ $2x = 6$ $x = 3$

Substitution	The process of replacing a variable in an expression with its actual value.	
Subtraction Property of Equality	States that when both sides of an equation have the same number subtracted from them, the remaining expressions are still equal.	2-1 Solving Equations by Adding or SubtractingProperties of EqualitywordsSubtraction Property of Equality You can subtract the same number from both sides of an equation, and the statement will still be true. $V = 7$ NUMBERS $7 = 7$ NUMBERS $7 - 5 = 7 - 5$ $2 = 2$ ALGEBRA $a - c = b - c$
Term	A number, a variable, or a product of numbers and variables.	Folt Algebra 1 Copyright 0 by Not, Rinkburg and Winton, All Rights gravered Find Find Find Find Find Find Find Find
Variable	A letter or symbol used to represent a number or quantities that vary.	terms 5x - 3 coefficient variable