ALGEBRAIC PROPERTIES CARD MATCHING

Equation	A statement that two expressions are equal.	5x + 9 = 24
Inverse Operations	Two operations that undo each other.	Addition and Subtraction
Equivalent Equations	Equations that have the same solutions.	x + 2 = 7 and 2x + 1 = 11
Addition Property of Equality	Adding the same number to each side of an equation produces an equivalent equation. If a = b, then a + c = b + c.	x-5 = 7 $(x-5)+5 = 7+5$ $x = 12$
Subtraction Property of Equality	Subtracting the same number from each side of an equation produces an equivalent equation. If a = b, then a – c = b – c.	x + 4 = 10 $(x + 4) - 4 = 10 - 4$ $x = 6$
Multiplication Property of Equality	Multiplying each side of an equation by the same nonzero number produces an equivalent equation. If a = b, then $a \cdot c = b \cdot c$.	$\frac{x}{5} = 7$ $\left(\frac{x}{5}\right) \cdot 5 = 7 \cdot 5$ $x = 35$
Division Property of Equality	Dividing each side of an equation by the same nonzero number produces an equivalent equation. If $a = b$, then $a \div c = b \div c$.	$6x = 24$ $\frac{6x}{6} = \frac{24}{6}$ $x = 4$

JOURNEY OF THE ISOLATED VARIABLE, PART 1

