## ALGEBRAIC PROPERTIES CARD SORT

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 of to 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 $a \cdot c = b \cdot c$ .	$\frac{x}{5} = 7$ $\binom{x}{5} \cdot 5 = 7 \cdot 5$ $x = 35$
Division Property of Equality	Dividing each side of an equation by the same nonzero number produces an equivalent equation. If $a=b$ , then $a \div c = b \div c$ .	$6x = 24$ $\frac{6x}{6} = \frac{24}{6}$ $x = 4$

