

NAVIGATOR Activity Center
Identify the algebraic property.
Suggested Problems for Activity

This is a whole class activity to review the academic vocabulary related to the algebraic properties.

Load the activity settings for AlgebraicProperties.act

To start from the beginning:

Load the background image AlgebraicProp.8xi

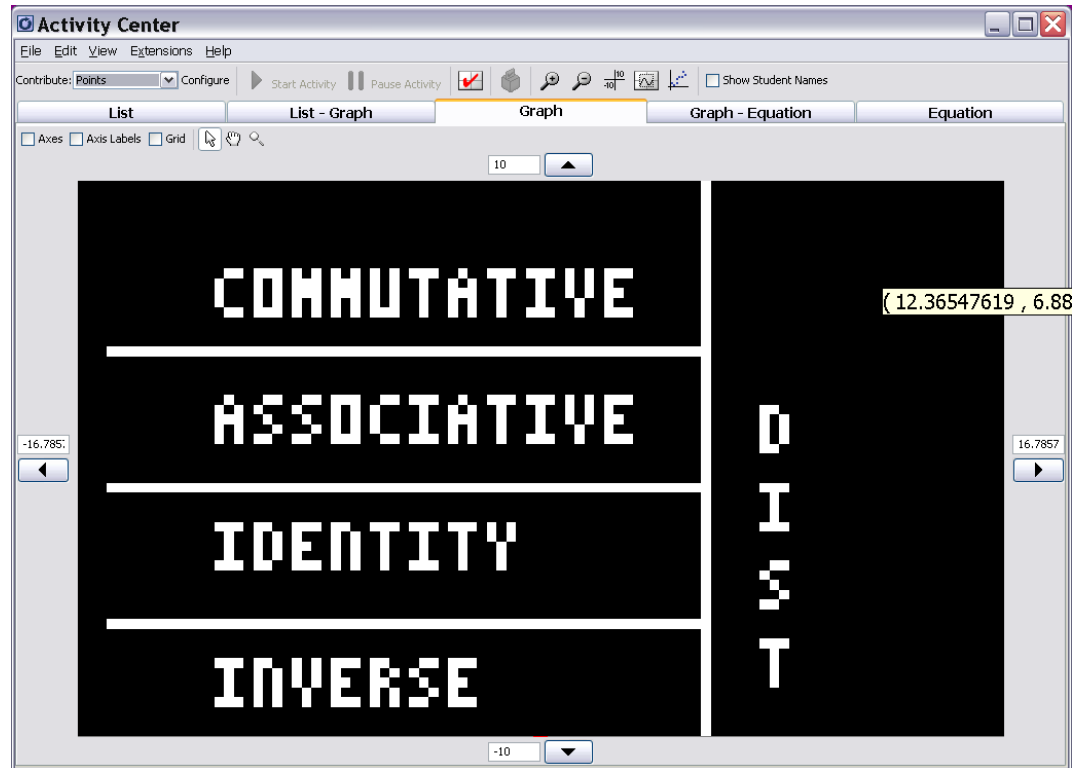
Set up the Activity Center so that students contribute points. To prevent students from plotting the white points on the screen, make sure students contribute zero points.

Individualize the student cursors.

Make sure the window is friendly for students to move from one area to another.

Call out or write down an example and give students a prescribed amount of time to move to the word that best describes the algebraic property of the example.

If you wish, have students write down the examples under the correct label for their notes. A blank outline is provided at the end of this document.



	Associative	Commutative	Identity	Inverse	Distributive
Additive	$(a + b) + c = a + (b + c)$	$a + b = b + a$	$a + 0 = a$	$a + (-a) = 0$	$a(b + c) = ab + ac$
	$(5 + 7) + 8 = 5 + (7 + 8)$	$5 + 8 = 8 + 5$	$7 + 0 = 7$	$12 + (-12) = 0$	$(x + y)z = xz + yz$
	$3x + (2x + x) = (3x + 2x) + x$	$7 + (x + y) = 7 + (y + x)$	$2 - 0 = 2$	$\frac{2}{3} + \left(-\frac{2}{3}\right) = 0$	$2(x - 3) = 2x - 2(3)$
	$10 + (x + 3) = (10 + x) + 3$	$(2 + 3) - x = (3 + 2) - x$	$\frac{1}{2} + 0 = \frac{1}{2}$	$5x + (-5x) = 0$	$4(x + y) = 4x + 4y$
	$(2x + 8y) + z = 2x + (8y + z)$	$11 + (x + 2) = (x + 2) + 11$	$8y + 0 = 8y$	$y + (-y) = 0$	$(5 + x)3 = 3(5) + 3x$
Multiplicative	$(ab)c = a(bc)$	$xy = yx$	$a \cdot 1 = a$	$a \cdot \frac{1}{a} = 1$	$w(x - y) = wx - wy$
	$(2x \cdot y) \cdot 3 = 2x \cdot (y \cdot 3)$	$5 + (3x) = 5 + (x \cdot 3)$	$5x \cdot 1 = 5x$	$8 \left(\frac{1}{8}\right) = 1$	$2x(x + 1) = 2x^2 + 2x$
	$4 \cdot (2 \cdot 8) = (4 \cdot 2) \cdot 8$	$5 \cdot 8 = 8 \cdot 5$	$3(1) = 3$	$\frac{1}{5} \cdot 5 = 1$	$(3 - x)4 = 12 - 4x$
	$\frac{1}{3} \cdot (9 \cdot x) = \left(\frac{1}{3} \cdot 9\right) \cdot x$	$\frac{1}{3}(12) = 12\left(\frac{1}{3}\right)$	$(abc) \cdot 1 = abc$	$\frac{3x}{1} \cdot \frac{1}{3x} = 1$	$7(x + 3y) = 7x + 21y$
	$(5x \cdot 3x)x = 5x(3x \cdot x)$	$3(x + 10) = (x + 10)3$	$(x + y) \cdot 1 = (x + y)$	$-\frac{4}{1} \left(-\frac{1}{4}\right) = 1$	$(3x + 4)y = 3xy + 4y$

	Associative	Commutative	Identity	Inverse		Distributive
Additive						
Multiplicative						