Exponent Block (Algebra)

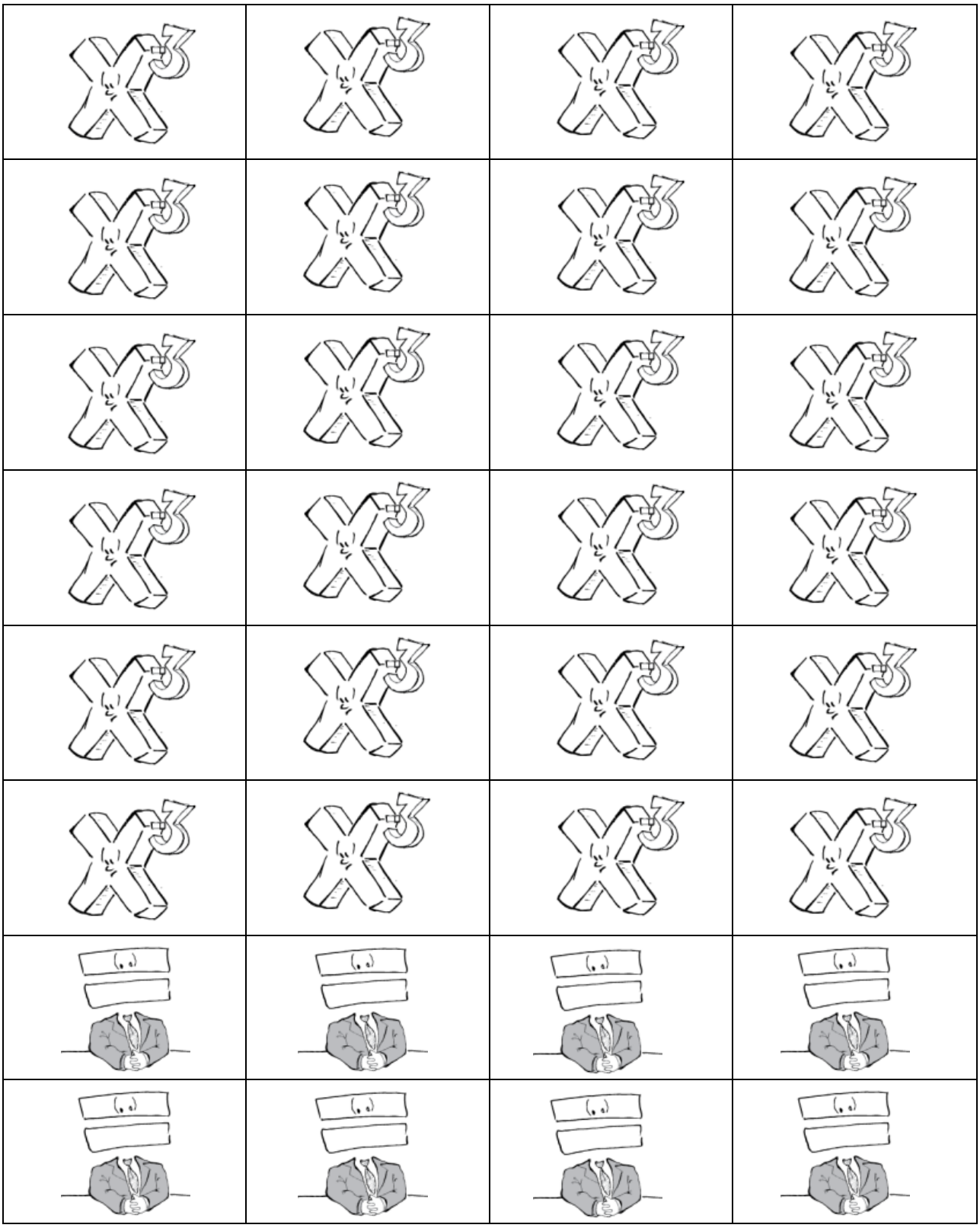
Learning Goal: Practice simplifying exponential expressions (no negative exponents allowed in answers). This is (ideally) a two-player game.

Game Setup: There is a gameboard, a set of game tiles, and two sets of player ID cards (one set is X, one set is =). It is very important that the two game tile pages get printed back to back on **cardstock** so that when it is cut out, you might see correct pairs as the front and back of a card. The player cards (= or x) should NOT be printed double sided.

Simplify. $(x^3)^4$	x^{12}

1. Place all the game tiles on the gameboard.
2. Players take turns declaring the answer for a card, then checking it. If they are correct, they get to stake a claim on the space. If they are incorrect, their opponent gets to claim the space.
3. The goal is to place four player ID cards on the board in a row, column, or on a diagonal.

Created by Maria H. Andersen, TeachingCollegeMath.com



Simplify. $(x^3)^4$	Simplify. $(a^2)^3$	Simplify. $\frac{2}{3^2}$	Simplify. $\left(\frac{2}{3}\right)^2$
Simplify. $(2x)^3$	Simplify. $(2a)^{-1}$	Simplify. $(-2y)^2$	Simplify. $(-2x)^{-1}$
Simplify. x^3x^4	Simplify. a^2a^4	Simplify. x^5x^{-2}	Simplify. y^4y
Simplify. $\frac{x^2}{x^5}$	Simplify. $\frac{a^5}{a^2}$	Simplify. $\frac{w^3}{w}$	Simplify. $\frac{w}{w^6}$
Simplify. x^{-3}	Simplify. $\frac{1}{a^{-2}}$	Simplify. $2x^{-3}$	Simplify. $(3y)^{-2}$
Simplify. $(-2)^{-1}$	Simplify. 3^{-2}	Simplify. $\left(\frac{2}{3}\right)^{-1}$	Simplify. $\frac{1}{3y^{-2}}$
Simplify. $\left(x^2x\right)^3$	Simplify. $\frac{a^2}{a^{-3}}$	Simplify. $5w^0$	Simplify. $(4y)^0$
Simplify. $x^{-2}y^0$	Simplify. $\frac{w^{-1}}{w}$	Simplify. $\left(\frac{4}{5}\right)^{-2}$	Simplify. $3a^{-2}$
Simplify. $-4x^{-1}$	Simplify. 2^{-3}	Simplify. $\frac{-2}{x^{-3}}$	Simplify. $\frac{x^{-2}}{x}$

$\frac{4}{9}$	$\frac{2}{9}$	a^6	x^{12}
$\frac{1}{-2x}$ or $-\frac{1}{2x}$	$4y^2$	$\frac{1}{2a}$	$8x^3$
y^5	x^3	a^6	x^7
$\frac{1}{w^5}$	w^2	a^3	$\frac{1}{x^3}$
$\frac{1}{9y^2}$	$\frac{2}{x^3}$	a^2	$\frac{1}{x^3}$
$\frac{y^2}{3}$	$\frac{3}{2}$	$\frac{1}{9}$	$-\frac{1}{2}$
1	5	a^5	x^9
$\frac{3}{a^2}$	$\frac{25}{16}$	$\frac{1}{w^2}$	$\frac{1}{x^2}$
$\frac{1}{x^3}$	$-2x^3$	$\frac{1}{8}$	$\frac{-4}{x}$