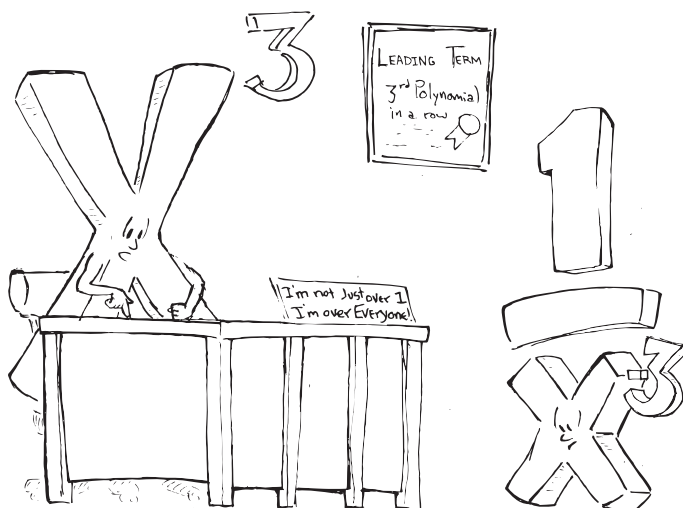# Student Activity
Match Up on Trickier Exponent Rules

Match-up: Match each of the expressions in the squares of the grid below with an equivalent simplified expression from the top. If an equivalent expression is not found among the choices A through D, then choose E (none of these).

A 1

B $\dfrac{4}{x^2}$

C $9x^2y^3$

D $\dfrac{-9x^4}{y^3}$

E None of these

Mark my words! You harness that negative power of yours, and you can make it to the top just like me!

$\left(4x^{-2}\right)^0$	$\left(4x\right)^{-2}$	$4x^{-2}$	$4x^0$	$\left(2x\right)^{-2}$
$\left(\dfrac{x}{2}\right)^{-2}$	$\dfrac{\left(-3xy\right)^2}{y^{-1}}$	$\dfrac{3^{-2}y^{-3}}{x^{-4}}$	$\dfrac{-\left(3x^2y\right)^2}{y^5}$	$\left(\dfrac{100x^{27}y^{35}}{a^4b^5}\right)^0$
$\left(\dfrac{x}{2}\right)^2$	$\left(9x^2y^3\right)^0$	$\left(-\dfrac{y}{a^4b^4}\right)\left(\dfrac{3xab}{y}\right)^4$	$y^7\left(\dfrac{y^2}{3x}\right)^{-2}$	$\left(2yz\right)^2\left(xyz\right)^{-2}$
$4\left(\dfrac{1}{x^2}\right)^0$	$8x^2\left(\dfrac{x^{-2}}{8}\right)$	$3\left(x^2y^2\right)\left(3x^2y^2\right)^{-1}$	$\dfrac{\left(2x^{-1}z^2\right)^2}{z^4}$	$\dfrac{-12x^4}{5}\left(\dfrac{5}{-12x^4}\right)$