


## Exponents – Simplifying Exponents with Algebraic Expression as a base

Directions: Simplifying each expression. Use your answer to navigate through the maze. Show your work.

<b>START</b> $4x^4y^3 \cdot 6x^{-2}y^{-5}$	$-2y^4 \cdot 8x^6y^6$	$\frac{25x^2y^6}{5y^{-4}}$	$\frac{15xy^6}{3xy^4}$
$\frac{24x^2}{y^2}$	$16x^{10}y^{12}$	$5x^2y^{10}$	
$24xy^2$	$32x^5y^{243}$	$-16x^6y^{10}$	$10x^{25}y^{10}$
$(2xy^3)^5$	$(3x^2y^4)^{-3}$	$(14x^2)^{-2}$	$(6x^4y^{-1})^0$
$32x^5y^{15}$	$\frac{1}{27x^6y^{12}}$	$\frac{-4}{x^2}$	
$32x^5y^{15}$	$2xy^7$	$\frac{1}{27x^2}$	$\frac{3x^2y^5}{5}$
$\frac{4xy^{-4}}{2y^3}$	$\frac{3y^6}{5x^2y}$	$\frac{6x^{-5}y^3}{24x^2}$	$0$
$\frac{x}{2y^7}$	$\frac{3y^5}{5x^2}$	$16x^3y^3$	
$\frac{2x}{y^7}$	$\frac{6}{x^8}$	$\frac{1}{6x^3y^3}$	$\frac{64}{4x^{-3}y^{-3}}$
$(3x^0y^4)^2$	$\frac{6x^4}{x^{-4}}$	$3y^{-4} \cdot 2x^3y^{-8}$	
$6y^8$	$6x^8$	$6x^3y^{12}$	
			<b>Good Job!</b>  <b>The End</b>