

Partner Problems for Exponents

Solve the following exponential expressions. Partner A will solve the first column. Partner B will solve the second column. You should get the same answers. If you don't, discuss how you got your answers, see where the problem is, and work together to fix the mistake.

Partner A _____

Partner B _____

$(4ab)(a^3b^5)$ $4a^4b^6$	$(2a^2b^3)^2$ $4a^4b^6$
$(4m^{-2}n^4)^3$ $\frac{64n^{12}}{m^6}$	$m^{-6}(8n^6)^2$ $m^{-6} \cdot 64n^{12}$ $\frac{64n^{12}}{m^6}$
$\frac{g^7h^6}{g^4}$ g^3h^6	$(gh^2)^3$ g^3h^6
$(3k^{-1}p)(3kp^{-4})$ $9k^0p^{-3} = \frac{9}{p^3}$	$\frac{36k^{-1}p^2}{4k^{-1}p^5} = 9k^0p^{-3}$ $\frac{9}{p^3}$
$\frac{3x^4y^4}{2xy^{-2}}$ $= \frac{3x^3y^6}{2}$	$(3x^4y^8)(2xy^2)^{-1}$ $\frac{3x^3y^6}{2}$ $\rightarrow 2^{-1}x^{-1}y^{-2}$
$(3s^{-3}t^2)^{-3}$ $\frac{5^9}{27t^6}$	$\frac{3s^5t}{81s^{-4}t^7}$ $\frac{1s^5t^4}{27} t^{-6}$ $\frac{5^9}{27t^6}$
$4x^8(8xy)^{-2}$ $\frac{x^6}{16y^2}$	$(4x^{-3}y)^{-2}$ $\frac{x^6}{16y^2}$
$\frac{35u^4v^3}{(7u^2v)(5u^4)}$ $\frac{v^2}{u^2}$	$\frac{(4u^6v^7)(3v^2)}{12u^8v^7} = \frac{12u^6v^9}{12u^8v^7}$ $\frac{v^2}{u^2}$
$m^4n^3(2mn)^4$ $16m^8n^7$	$m^2n(4m^3n^3)^2$ $m^2n \cdot 16m^6n^6$ $16m^8n^7$
$\frac{(2x^{-4}y^{-3})^3}{2y^{-2}}$ $\frac{4}{x^{12}y^7}$	$\frac{16y^3}{(2x^6y^5)^2}$ $\frac{16y^3}{4x^{12}y^{10}}$ $\frac{4}{x^{12}y^7}$