

$$\frac{(2x)^{-2} y^5}{-4x^2 y^2} = \frac{2^{-2} x^{-2} y^5}{-4 x^2 y^2}$$

$$\frac{\frac{1}{2^2} \cdot \frac{1}{x^2} \cdot \frac{y^5}{1}}{-4x^2 y^2} = \frac{\frac{y^5}{4x^2}}{-4x^2 y^2} =$$

$$\frac{y^5}{4x^2} \div \frac{-4x^2 y^2}{1} = \frac{y^5}{4x^2} \cdot \frac{1}{-4x^2 y^2} =$$

$$\frac{y^3}{-16x^4}$$

2^3	8	$\frac{1}{2} \div 2 =$
2^2	4	$\frac{1}{2} \cdot \frac{1}{2} = \frac{1}{4} = \frac{1}{2^2}$
2^1	2	$\frac{1}{2} \div 2 = \frac{1}{2^2} \cdot \frac{1}{2} = \frac{1}{2^3}$
2^0	1	
2^{-1}	$\frac{1}{2}$	
2^{-2}	$\frac{1}{2^2}$	
2^{-3}	$\frac{1}{2^3}$	

Red annotations: Brackets on the right side of the table indicate division by 2 between adjacent rows. An arrow points from the 2^1 row to the $\frac{1}{2}$ row in the third column.

