

Simplify.

$$\text{Ex. 1: } \frac{b^{-7}}{b^{-5}} = \frac{b^5}{b^7} = \frac{1}{b^2}$$

① Make a fraction in the problem? in the answer.

② Make all neg exponents happy

③ Simplify

$$\text{Ex. 2: } \frac{a^9}{a^{-3}} = \frac{a^9 a^3}{1} = a^{12}$$

$$\text{Ex. 3: } \frac{c^{-4}}{c^6} = \frac{1}{c^4 c^6} = \frac{1}{c^{10}}$$

$$\text{Ex. 4: } \frac{d^2}{d^7} = \frac{1}{d^5}$$

Simplify.

$$\text{Ex. 5: } (x^{-5})^{-3} = x^{15}$$

$$\text{Ex. 6: } (-2x^3y^5)^{-4} = \frac{(-2)^{-4} x^{-12} y^{-20}}{1} = \frac{1}{(-2)^4 x^{12} y^{20}} = \frac{1}{16x^{12}y^{20}}$$

① Get rid of ( )

② Make it a fraction

$$\frac{1}{(-2)^4 x^{12} y^{20}} = \frac{1}{16x^{12}y^{20}}$$

$$\text{Ex. 7: } \frac{5x^0y^{-2}}{5(1)y^{-2}} = \frac{5y^{-2}}{1} = \frac{5}{y^2}$$

$$\text{Ex. 8: } \frac{15x^3 \cancel{y^6}}{3x^1y^4y^6} = \frac{5x^2}{y^{10}}$$

Simplify.

$$\text{Ex. 9: } \frac{(xy^{-2})^{-1}}{x^{-3}y} = \frac{x^{-1}y^2}{x^{-3}y} = \frac{x^3y^2}{x^1y^1}$$

$x^2y$

$$\text{Ex. 10: } (24.7x^{24}y^{0.5}z^{-3.7})^0 \quad (1)$$