

$$\left(\frac{2}{3}\right)^{-2} = \frac{3^2}{2^2} = \frac{9}{4}$$

$$\left(\frac{1}{2}\right)^{-3} = \frac{2^3}{1^3} = \frac{8}{1} = 8$$

$$\left(\frac{6x+5}{x-1}\right)^{-3} = \frac{(x-1)^3}{(6x+5)^3}$$

$$\left(\frac{1}{(x+2)^3}\right)^{-5} = \frac{[(x+2)^3]^5}{1^5} = (x+2)^{15}$$

$$\left(\frac{y^{-3}}{x^{-4}}\right)^{-6} = \frac{(x^{-4})^6}{(y^{-3})^6} = \frac{x^{-24}}{y^{-18}} = \frac{\frac{1}{x^{24}}}{\frac{1}{y^{18}}} = \frac{1}{x^{24}} \div \frac{1}{y^{18}} = \frac{1}{x^{24}} \cdot \frac{y^{18}}{1} = \frac{y^{18}}{x^{24}}$$