

$$\left(\frac{2}{5}\right)^3 = \frac{2}{5} \cdot \frac{2}{5} \cdot \frac{2}{5} = \frac{2^3}{5^3} = \frac{8}{125} \quad \left(\frac{x}{y}\right)^4 = \frac{x^4}{y^4}$$

$$\left(\frac{x^2}{y^5}\right)^4 = \frac{(x^2)^4}{(y^5)^4} = \frac{x^8}{y^{20}}$$

$$\left(\frac{x}{y}\right)^{-n} = \left(\frac{x}{y}\right)^{(-1)(n)} = \left[\left(\frac{x}{y}\right)^{-1}\right]^n = \left(\frac{y}{x}\right)^n = \frac{y^n}{x^n}$$