6^3

Negative exponents in the numerator are positive exponents in the denominator.

$3^{-5} = \frac{1}{3^5}$

10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3}

Quotient of two powers with the same base

$8^9 \div 8^3 =$

$$\frac{2xy^2 \cdot x^{-2}y^2}{y^0 \cdot 4y^2}$$

$$\frac{4x^2y^2 \cdot 4x^4y^3}{yx^{-2}}$$

$$\frac{2m^4n^2}{mn^4 \cdot 3m^{-2}}$$

$$\frac{a^3b^3 \cdot 3a^4b^{-3}}{2a^2b^0}$$

$$\frac{3x^0y^{-2}}{3x^4 \cdot 2x^{-4}y^4}$$