

Operations with
ExponentsExponent Rules

$$\frac{x^5}{x^3}$$

$$\frac{x^4}{x^4}$$

$$7^0 \quad \text{or} \quad r^0$$

$$(-4)^0 \quad \text{or} \quad \left(\frac{x^3 y^5}{9z^6}\right)^0$$

$$-3^0 \quad \text{or} \quad -5x^0$$

$$6y^0 + z^0$$

$$4^{-2}$$

$$4x^{-2}$$

$$7m^5 n^{-3}$$

$$\frac{8r^6}{s^{-4}}$$

1. $\left(\frac{1}{7}\right)^{-2}$

2. $\left(\frac{3x^{-5}y}{8z^4}\right)^{-2}$

3. $\frac{p^3r^{-5}}{p^{-7}q^0r^4}$

4. $(2u^7)^{-3}$

5. $(-4s^9)^{-2}$

6. $(5t^0u^{-6})^{-3}$

7.

$$\left(\frac{x^4 y^{-9}}{x^{-10} y^{-8}} \right)^2$$

8.

$$\left(\frac{x^4 y^{-9}}{x^{-10} y^{-8}} \right)^{-2}$$

$$9. (6m^3 n^{-4})(-5m^7 n^{-2})$$

$$10a) y^3 y^{-10} y^5$$

$$10b) 2^4 \cdot 2^{-7}$$

$$11. 4^{-1} + 6^{-2}$$