

Practice Exercises

Convert the following expressions into expressions with positive exponents.

1. b^{-4}

2. $\frac{c^{-3}}{d^{-8}}$

3. $w^{-3}z^{-2}$

4. $a^3b^{-3}c$

5. $de^{-5}f$

6. $\frac{(x+y)}{(x-y)^0}$

Problem Set

Convert the following expressions into expressions with positive exponents.

1. a^{-7}

2. $\frac{a^{-4}}{e^{-5}}$

3. $x^{-2}y^{-5}$

4. $x^2y^{-5}z$

5. $mn^{-6}p$

6. $\frac{(a-b)}{(a+b)^0}$

7. $x^{-7}y^2z^{-4}$

8. $a^{-4}b^5c^{-2}$

9. $m^{-3}n^2p^{-8}$

10. $\frac{(m^2 - n)}{(m^2 + n)^0}$

Problem Set

$$1. \quad \frac{1}{a^7}$$

$$\begin{aligned} 2. \quad & \frac{\frac{1}{a^4}}{\frac{1}{e^5}} \\ &= \frac{1}{a^4} \div \frac{1}{e^5} \\ &= \left(\frac{1}{a^4} \right) (e^5) \\ &= \frac{e^5}{a^4} \end{aligned}$$

$$3. \quad \left(\frac{1}{x^2} \right) \left(\frac{1}{y^5} \right) = \frac{1}{x^2 y^5}$$

$$4. \quad (x^2) \left(\frac{1}{y^5} \right) (z) = \frac{x^2 z}{y^5}$$

$$5. \quad (m) \left(\frac{1}{n^6} \right) (p) = \frac{mp}{n^6}$$

$$6. \quad \frac{(a-b)}{1} = a-b$$

$$7. \quad \left(\frac{1}{x^7} \right) (y^2) \left(\frac{1}{z^4} \right)$$

$$= \frac{y^2}{x^7 z^4}$$

$$8. \quad \left(\frac{1}{a^4}\right) (b^5) \left(\frac{1}{c^2}\right) \\ = \frac{b^5}{a^4 c^2}$$

$$9. \quad \left(\frac{1}{m^3}\right) (n^2) \left(\frac{1}{p^8}\right) \\ = \frac{n^2}{m^3 p^8}$$

$$10. \quad \frac{(m^2 - n)}{1} = m^2 - n$$