

Dividing Exponents (J)

Simplify each expression.

1. $\frac{(-3)^0}{(-3)^{-9}}$

2. $\frac{(-8)^{-1}}{(-8)^{-7}}$

3. $\frac{2^2}{2^{-4}}$

4. $\frac{(-5)^{-6}}{(-5)^{-7}}$

5. $\frac{(-6)^{-5}}{(-6)^{-6}}$

6. $\frac{4^9}{4^8}$

7. $\frac{6^{-5}}{6^{-7}}$

8. $\frac{(-3)^3}{(-3)^1}$

9. $\frac{(-4)^4}{(-4)^0}$

10. $\frac{(-4)^4}{(-4)^{-7}}$

Dividing Exponents (J) Answers

Simplify each expression.

$$\begin{aligned} 1. \quad & \frac{(-3)^0}{(-3)^{-9}} \\ & = (-3)^9 \end{aligned}$$

$$\begin{aligned} 2. \quad & \frac{(-8)^{-1}}{(-8)^{-7}} \\ & = (-8)^6 \end{aligned}$$

$$\begin{aligned} 3. \quad & \frac{2^2}{2^{-4}} \\ & = 2^6 \end{aligned}$$

$$\begin{aligned} 4. \quad & \frac{(-5)^{-6}}{(-5)^{-7}} \\ & = (-5) \end{aligned}$$

$$\begin{aligned} 5. \quad & \frac{(-6)^{-5}}{(-6)^{-6}} \\ & = (-6) \end{aligned}$$

$$\begin{aligned} 6. \quad & \frac{4^9}{4^8} \\ & = 4 \end{aligned}$$

$$\begin{aligned} 7. \quad & \frac{6^{-5}}{6^{-7}} \\ & = 6^2 \end{aligned}$$

$$\begin{aligned} 8. \quad & \frac{(-3)^3}{(-3)^1} \\ & = (-3)^2 \end{aligned}$$

$$\begin{aligned} 9. \quad & \frac{(-4)^4}{(-4)^0} \\ & = (-4)^4 \end{aligned}$$

$$\begin{aligned} 10. \quad & \frac{(-4)^4}{(-4)^{-7}} \\ & = (-4)^{11} \end{aligned}$$