

Dividing Exponents (A)

Simplify each expression.

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

2. $\frac{8^6}{8^5}$

3. $\frac{4^{-5}}{4^{-6}}$

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

5. $\frac{2^8}{2^{-1}}$

6. $\frac{5^9}{5^{-1}}$

7. $\frac{7^{-4}}{7^{-5}}$

8. $\frac{8^0}{8^{-6}}$

9. $\frac{(-7)^4}{(-7)^{-9}}$

10. $\frac{(-4)^1}{(-4)^0}$

Dividing Exponents (A) Answers

Simplify each expression.

$$\begin{aligned} 1. \quad & \frac{(-2)^{-8}}{(-2)^{-8}} \\ & = (-2)^0 = 1 \end{aligned}$$

$$\begin{aligned} 2. \quad & \frac{8^6}{8^5} \\ & = 8 \end{aligned}$$

$$\begin{aligned} 3. \quad & \frac{4^{-5}}{4^{-6}} \\ & = 4 \end{aligned}$$

$$\begin{aligned} 4. \quad & \frac{2^4}{2^{-4}} \\ & = 2^8 \end{aligned}$$

$$\begin{aligned} 5. \quad & \frac{2^8}{2^{-1}} \\ & = 2^9 \end{aligned}$$

$$\begin{aligned} 6. \quad & \frac{5^9}{5^{-1}} \\ & = 5^{10} \end{aligned}$$

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

$$\begin{aligned} 8. \quad & \frac{8^0}{8^{-6}} \\ & = 8^6 \end{aligned}$$

$$\begin{aligned} 9. \quad & \frac{(-7)^4}{(-7)^{-9}} \\ & = (-7)^{13} \end{aligned}$$

$$\begin{aligned} 10. \quad & \frac{(-4)^1}{(-4)^0} \\ & = (-4) \end{aligned}$$