

## Dividing Exponents (D)

Simplify each expression.

1.  $\frac{(-9)^{-1}}{(-9)^{-4}}$

2.  $\frac{(-4)^{-3}}{(-4)^{-8}}$

3.  $\frac{4^0}{4^0}$

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

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

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

7.  $\frac{(-5)^8}{(-5)^3}$

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

9.  $\frac{7^0}{7^{-1}}$

10.  $\frac{(-6)^{-6}}{(-6)^{-9}}$

## Dividing Exponents (D) Answers

Simplify each expression.

$$\begin{aligned} 1. \quad & \frac{(-9)^{-1}}{(-9)^{-4}} \\ & = (-9)^3 \end{aligned}$$

$$\begin{aligned} 2. \quad & \frac{(-4)^{-3}}{(-4)^{-8}} \\ & = (-4)^5 \end{aligned}$$

$$\begin{aligned} 3. \quad & \frac{4^0}{4^0} \\ & = 4^0 = 1 \end{aligned}$$

$$\begin{aligned} 4. \quad & \frac{(-3)^7}{(-3)^{-2}} \\ & = (-3)^9 \end{aligned}$$

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

$$\begin{aligned} 6. \quad & \frac{9^6}{9^{-1}} \\ & = 9^7 \end{aligned}$$

$$\begin{aligned} 7. \quad & \frac{(-5)^8}{(-5)^3} \\ & = (-5)^5 \end{aligned}$$

$$\begin{aligned} 8. \quad & \frac{6^{-8}}{6^{-8}} \\ & = 6^0 = 1 \end{aligned}$$

$$\begin{aligned} 9. \quad & \frac{7^0}{7^{-1}} \\ & = 7 \end{aligned}$$

$$\begin{aligned} 10. \quad & \frac{(-6)^{-6}}{(-6)^{-9}} \\ & = (-6)^3 \end{aligned}$$