

# Dividing Exponents (G)

Simplify each expression.

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

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

3.  $\frac{(-9)^{-2}}{(-9)^{-5}}$

4.  $\frac{9^4}{9^1}$

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

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

7.  $\frac{(-2)^{-3}}{(-2)^{-9}}$

8.  $\frac{(-5)^{-1}}{(-5)^{-7}}$

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

10.  $\frac{(-3)^{-5}}{(-3)^{-9}}$

## Dividing Exponents (G) Answers

Simplify each expression.

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

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

$$\begin{aligned} 3. \quad & \frac{(-9)^{-2}}{(-9)^{-5}} \\ & = (-9)^3 \end{aligned}$$

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

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

$$\begin{aligned} 6. \quad & \frac{3^5}{3^5} \\ & = 3^0 = 1 \end{aligned}$$

$$\begin{aligned} 7. \quad & \frac{(-2)^{-3}}{(-2)^{-9}} \\ & = (-2)^6 \end{aligned}$$

$$\begin{aligned} 8. \quad & \frac{(-5)^{-1}}{(-5)^{-7}} \\ & = (-5)^6 \end{aligned}$$

$$\begin{aligned} 9. \quad & \frac{(-8)^{-2}}{(-8)^{-2}} \\ & = (-8)^0 = 1 \end{aligned}$$

$$\begin{aligned} 10. \quad & \frac{(-3)^{-5}}{(-3)^{-9}} \\ & = (-3)^4 \end{aligned}$$