

Dividing Exponents (J)

Simplify each expression.

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

2. $\frac{2^4}{2^8}$

3. $\frac{7^2}{7^9}$

4. $\frac{4^2}{4^6}$

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

6. $\frac{4^7}{4^7}$

7. $\frac{3^1}{3^9}$

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

9. $\frac{4^7}{4^8}$

10. $\frac{4^5}{4^9}$

Dividing Exponents (J) Answers

Simplify each expression.

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

$$= 2^{-7} = \frac{1}{2^7}$$

2. $\frac{2^4}{2^8}$

$$= 2^{-4} = \frac{1}{2^4}$$

3. $\frac{7^2}{7^9}$

$$= 7^{-7} = \frac{1}{7^7}$$

4. $\frac{4^2}{4^6}$

$$= 4^{-4} = \frac{1}{4^4}$$

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

$$= 6^{-5} = \frac{1}{6^5}$$

6. $\frac{4^7}{4^7}$

$$= 4^0 = 1$$

7. $\frac{3^1}{3^9}$

$$= 3^{-8} = \frac{1}{3^8}$$

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

$$= 5^0 = 1$$

9. $\frac{4^7}{4^8}$

$$= 4^{-1} = \frac{1}{4}$$

10. $\frac{4^5}{4^9}$

$$= 4^{-4} = \frac{1}{4^4}$$