

Dividing Exponents (H)

Simplify each expression.

1. $\frac{8^8}{8^9}$

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

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

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

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

6. $\frac{3^2}{3^6}$

7. $\frac{5^1}{5^7}$

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

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

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

Dividing Exponents (H) Answers

Simplify each expression.

1. $\frac{8^8}{8^9}$

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

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

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

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

$$= 9^{-1} = \frac{1}{9}$$

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

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

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

$$= 4^0 = 1$$

6. $\frac{3^2}{3^6}$

$$= 3^{-4} = \frac{1}{3^4}$$

7. $\frac{5^1}{5^7}$

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

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

$$= 6^0 = 1$$

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

$$= 9^{-5} = \frac{1}{9^5}$$

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

$$= 9^0 = 1$$