Dividing Exponents (A)

Simplify each expression.

1. $\dfrac{5^8}{5^8}$

2. $\dfrac{2^0}{2^0}$

3. $\dfrac{6^2}{6^7}$

4. $\dfrac{4^2}{4^7}$

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

6. $\dfrac{7^1}{7^2}$

7. $\dfrac{2^4}{2^9}$

8. $\dfrac{3^1}{3^3}$

9. $\dfrac{2^2}{2^5}$

10. $\dfrac{7^5}{7^5}$

Dividing Exponents (A) Answers

Simplify each expression.

1. $\dfrac{5^8}{5^8}$

$= 5^0 = 1$

2. $\dfrac{2^0}{2^0}$

$= 2^0 = 1$

3. $\dfrac{6^2}{6^7}$

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

4. $\dfrac{4^2}{4^7}$

$= 4^{-5} = \dfrac{1}{4^5}$

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

$= 7^{-4} = \dfrac{1}{7^4}$

6. $\dfrac{7^1}{7^2}$

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

7. $\dfrac{2^4}{2^9}$

$= 2^{-5} = \dfrac{1}{2^5}$

8. $\dfrac{3^1}{3^3}$

$= 3^{-2} = \dfrac{1}{3^2}$

9. $\dfrac{2^2}{2^5}$

$= 2^{-3} = \dfrac{1}{2^3}$

10. $\dfrac{7^5}{7^5}$

$= 7^0 = 1$

Dividing Exponents (B)

Simplify each expression.

1. $\dfrac{3^8}{3^8}$

2. $\dfrac{5^8}{5^9}$

3. $\dfrac{2^7}{2^7}$

4. $\dfrac{5^4}{5^7}$

5. $\dfrac{6^5}{6^7}$

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

7. $\dfrac{8^5}{8^6}$

8. $\dfrac{9^3}{9^5}$

9. $\dfrac{5^6}{5^7}$

10. $\dfrac{9^8}{9^9}$

Dividing Exponents (B) Answers

Simplify each expression.

1. $\dfrac{3^8}{3^8}$

$= 3^0 = 1$

2. $\dfrac{5^8}{5^9}$

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

3. $\dfrac{2^7}{2^7}$

$= 2^0 = 1$

4. $\dfrac{5^4}{5^7}$

$= 5^{-3} = \dfrac{1}{5^3}$

5. $\dfrac{6^5}{6^7}$

$= 6^{-2} = \dfrac{1}{6^2}$

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

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

7. $\dfrac{8^5}{8^6}$

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

8. $\dfrac{9^3}{9^5}$

$= 9^{-2} = \dfrac{1}{9^2}$

9. $\dfrac{5^6}{5^7}$

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

10. $\dfrac{9^8}{9^9}$

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

Dividing Exponents (C)

Simplify each expression.

1. $\dfrac{8^8}{8^8}$

2. $\dfrac{2^8}{2^8}$

3. $\dfrac{2^4}{2^9}$

4. $\dfrac{5^1}{5^7}$

5. $\dfrac{6^1}{6^3}$

6. $\dfrac{9^5}{9^5}$

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

8. $\dfrac{7^1}{7^5}$

9. $\dfrac{3^8}{3^8}$

10. $\dfrac{8^7}{8^9}$

Dividing Exponents (C) Answers

Simplify each expression.

1. $\dfrac{8^8}{8^8}$

$= 8^0 = 1$

2. $\dfrac{2^8}{2^8}$

$= 2^0 = 1$

3. $\dfrac{2^4}{2^9}$

$= 2^{-5} = \dfrac{1}{2^5}$

4. $\dfrac{5^1}{5^7}$

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

5. $\dfrac{6^1}{6^3}$

$= 6^{-2} = \dfrac{1}{6^2}$

6. $\dfrac{9^5}{9^5}$

$= 9^0 = 1$

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

$= 6^{-3} = \dfrac{1}{6^3}$

8. $\dfrac{7^1}{7^5}$

$= 7^{-4} = \dfrac{1}{7^4}$

9. $\dfrac{3^8}{3^8}$

$= 3^0 = 1$

10. $\dfrac{8^7}{8^9}$

$= 8^{-2} = \dfrac{1}{8^2}$

Dividing Exponents (D)

Simplify each expression.

1. $\dfrac{9^6}{9^8}$

2. $\dfrac{5^7}{5^7}$

3. $\dfrac{5^3}{5^4}$

4. $\dfrac{7^8}{7^8}$

5. $\dfrac{9^3}{9^4}$

6. $\dfrac{9^6}{9^8}$

7. $\dfrac{3^5}{3^7}$

8. $\dfrac{3^1}{3^6}$

9. $\dfrac{9^5}{9^6}$

10. $\dfrac{7^2}{7^6}$

Dividing Exponents (D) Answers

Simplify each expression.

1. $\dfrac{9^6}{9^8}$

$= 9^{-2} = \dfrac{1}{9^2}$

2. $\dfrac{5^7}{5^7}$

$= 5^0 = 1$

3. $\dfrac{5^3}{5^4}$

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

4. $\dfrac{7^8}{7^8}$

$= 7^0 = 1$

5. $\dfrac{9^3}{9^4}$

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

6. $\dfrac{9^6}{9^8}$

$= 9^{-2} = \dfrac{1}{9^2}$

7. $\dfrac{3^5}{3^7}$

$= 3^{-2} = \dfrac{1}{3^2}$

8. $\dfrac{3^1}{3^6}$

$= 3^{-5} = \dfrac{1}{3^5}$

9. $\dfrac{9^5}{9^6}$

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

10. $\dfrac{7^2}{7^6}$

$= 7^{-4} = \dfrac{1}{7^4}$

Dividing Exponents (E)

Simplify each expression.

1. $\dfrac{8^6}{8^6}$

2. $\dfrac{7^1}{7^6}$

3. $\dfrac{4^6}{4^6}$

4. $\dfrac{9^5}{9^7}$

5. $\dfrac{8^2}{8^2}$

6. $\dfrac{8^4}{8^6}$

7. $\dfrac{6^8}{6^9}$

8. $\dfrac{7^1}{7^6}$

9. $\dfrac{7^0}{7^5}$

10. $\dfrac{7^5}{7^8}$

Dividing Exponents (E) Answers

Simplify each expression.

1. $\dfrac{8^6}{8^6}$

$= 8^0 = 1$

2. $\dfrac{7^1}{7^6}$

$= 7^{-5} = \dfrac{1}{7^5}$

3. $\dfrac{4^6}{4^6}$

$= 4^0 = 1$

4. $\dfrac{9^5}{9^7}$

$= 9^{-2} = \dfrac{1}{9^2}$

5. $\dfrac{8^2}{8^2}$

$= 8^0 = 1$

6. $\dfrac{8^4}{8^6}$

$= 8^{-2} = \dfrac{1}{8^2}$

7. $\dfrac{6^8}{6^9}$

$= 6^{-1} = \dfrac{1}{6}$

8. $\dfrac{7^1}{7^6}$

$= 7^{-5} = \dfrac{1}{7^5}$

9. $\dfrac{7^0}{7^5}$

$= 7^{-5} = \dfrac{1}{7^5}$

10. $\dfrac{7^5}{7^8}$

$= 7^{-3} = \dfrac{1}{7^3}$

Dividing Exponents (F)

Simplify each expression.

1. $\dfrac{2^2}{2^7}$

2. $\dfrac{3^2}{3^8}$

3. $\dfrac{7^7}{7^7}$

4. $\dfrac{8^0}{8^9}$

5. $\dfrac{9^2}{9^9}$

6. $\dfrac{2^3}{2^8}$

7. $\dfrac{7^7}{7^9}$

8. $\dfrac{6^6}{6^9}$

9. $\dfrac{9^8}{9^9}$

10. $\dfrac{2^2}{2^4}$

Dividing Exponents (F) Answers

Simplify each expression.

1. $\dfrac{2^2}{2^7}$

$= 2^{-5} = \dfrac{1}{2^5}$

2. $\dfrac{3^2}{3^8}$

$= 3^{-6} = \dfrac{1}{3^6}$

3. $\dfrac{7^7}{7^7}$

$= 7^0 = 1$

4. $\dfrac{8^0}{8^9}$

$= 8^{-9} = \dfrac{1}{8^9}$

5. $\dfrac{9^2}{9^9}$

$= 9^{-7} = \dfrac{1}{9^7}$

6. $\dfrac{2^3}{2^8}$

$= 2^{-5} = \dfrac{1}{2^5}$

7. $\dfrac{7^7}{7^9}$

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

8. $\dfrac{6^6}{6^9}$

$= 6^{-3} = \dfrac{1}{6^3}$

9. $\dfrac{9^8}{9^9}$

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

10. $\dfrac{2^2}{2^4}$

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

Dividing Exponents (G)

Simplify each expression.

1. $\dfrac{6^5}{6^8}$

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

3. $\dfrac{4^3}{4^3}$

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

5. $\dfrac{2^2}{2^3}$

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

7. $\dfrac{6^8}{6^9}$

8. $\dfrac{7^3}{7^7}$

9. $\dfrac{5^5}{5^5}$

10. $\dfrac{9^6}{9^6}$

Dividing Exponents (G) Answers

Simplify each expression.

1. $\dfrac{6^5}{6^8}$

$= 6^{-3} = \dfrac{1}{6^3}$

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

$= 4^0 = 1$

3. $\dfrac{4^3}{4^3}$

$= 4^0 = 1$

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

$= 3^0 = 1$

5. $\dfrac{2^2}{2^3}$

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

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

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

7. $\dfrac{6^8}{6^9}$

$= 6^{-1} = \dfrac{1}{6}$

8. $\dfrac{7^3}{7^7}$

$= 7^{-4} = \dfrac{1}{7^4}$

9. $\dfrac{5^5}{5^5}$

$= 5^0 = 1$

10. $\dfrac{9^6}{9^6}$

$= 9^0 = 1$

Dividing Exponents (H)

Simplify each expression.

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

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

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

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

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

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

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

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

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

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

Dividing Exponents (H) Answers

Simplify each expression.

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

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

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

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

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

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

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

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

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

$= 4^0 = 1$

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

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

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

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

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

$= 6^0 = 1$

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

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

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

$= 9^0 = 1$

Dividing Exponents (I)

Simplify each expression.

1. $\dfrac{5^0}{5^4}$

2. $\dfrac{3^7}{3^8}$

3. $\dfrac{2^8}{2^8}$

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

5. $\dfrac{6^2}{6^6}$

6. $\dfrac{4^3}{4^3}$

7. $\dfrac{5^0}{5^9}$

8. $\dfrac{7^0}{7^1}$

9. $\dfrac{9^3}{9^5}$

10. $\dfrac{9^5}{9^7}$

Dividing Exponents (I) Answers

Simplify each expression.

1. $\dfrac{5^0}{5^4}$

$= 5^{-4} = \dfrac{1}{5^4}$

2. $\dfrac{3^7}{3^8}$

$= 3^{-1} = \dfrac{1}{3}$

3. $\dfrac{2^8}{2^8}$

$= 2^0 = 1$

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

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

5. $\dfrac{6^2}{6^6}$

$= 6^{-4} = \dfrac{1}{6^4}$

6. $\dfrac{4^3}{4^3}$

$= 4^0 = 1$

7. $\dfrac{5^0}{5^9}$

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

8. $\dfrac{7^0}{7^1}$

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

9. $\dfrac{9^3}{9^5}$

$= 9^{-2} = \dfrac{1}{9^2}$

10. $\dfrac{9^5}{9^7}$

$= 9^{-2} = \dfrac{1}{9^2}$

Dividing Exponents (J)

Simplify each expression.

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

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

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

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

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

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

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

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

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

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

Dividing Exponents (J) Answers

Simplify each expression.

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

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

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

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

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

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

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

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

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

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

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

$= 4^{0} = 1$

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

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

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

$= 5^{0} = 1$

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

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

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

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