

Quotient Exponent Rule (A)

Name: _____

Date: _____

Score: _____

Simplify each expression.

1. $\frac{-7^4}{-7^5}$

2. $\frac{-3^{-3}}{-3^8}$

3. $\frac{7^{-8}}{7^{-2}}$

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

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

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

7. $\frac{-8^{-5}}{-8^4}$

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

9. $\frac{-7^{-2}}{-7^8}$

10. $\frac{-4^{-8}}{-4^{-3}}$

Quotient Exponent Rule (A) Answers

Name: _____

Date: _____

Score: _____

Simplify each expression.

1. $\frac{-7^4}{-7^5}$

$$-7^{4-5} = -7^{-1} = -\frac{1}{7}$$

2. $\frac{-3^{-3}}{-3^8}$

$$-3^{-3-8} = -3^{-11} = -\frac{1}{3^{11}}$$

3. $\frac{7^{-8}}{7^{-2}}$

$$7^{-8-(-2)} = 7^{-6} = \frac{1}{7^6}$$

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

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

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

$$2^{6-8} = 2^{-2} = \frac{1}{2^2}$$

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

$$-5^{-9-(-6)} = -5^{-3} = -\frac{1}{5^3}$$

7. $\frac{-8^{-5}}{-8^4}$

$$-8^{-5-4} = -8^{-9} = -\frac{1}{8^9}$$

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

$$6^{-6-(-2)} = 6^{-4} = \frac{1}{6^4}$$

9. $\frac{-7^{-2}}{-7^8}$

$$-7^{-2-8} = -7^{-10} = \frac{1}{7^{10}}$$

10. $\frac{-4^{-8}}{-4^{-3}}$

$$-4^{-8-(-3)} = -4^{-5} = -\frac{1}{4^5}$$