

Exponents; Quotient and Zero Rules

Quotient Rule

When you divide numbers with the same base, you subtract the exponents.

Zero Rule

Any number to the zero power, except zero, equals 1.

Perform the following operations.

1. x^7/x^3

2. $Y^{10} \div Y^4$

3. $\frac{12x^7}{2x^3}$

4. $\frac{20x^7y^3}{-4x^3y}$

5. $\frac{24x^5y^3}{-8x^3y^2}$

6. $\frac{(4x^5y^3)(-10xy^3)}{-5x^3y^2}$

7. x^0

8. $(2x/7y)^0$

9. $\frac{2x^4x^5}{x^9}$

10. $(3x^2 + 7x - 12)^0$