Power of a Quotient Property

$$\left(\frac{a}{b}\right)^m = \frac{a^m}{b^m}$$

When taking a fraction to a power, take the numerator (top) to the power and the denominator (bottom) to the power.

Examples

1. $\left(\frac{2}{3}\right)^4 = \frac{2^4}{3^4} = \frac{16}{81}$
2. $\left(\frac{x}{y}\right)^2 = \frac{x^2}{y^2}$
3. $\left(-\frac{n}{3}\right)^3 = \frac{(-n)^3}{3^3} = \frac{-n^3}{27}$

Try These

1. $\left(\frac{5}{2}\right)^2$ 1. _____
2. $\left(-\frac{3}{7}\right)^2$ 2. _____
3. $\left(-\frac{x}{y}\right)^6$ 3. _____
4. $\left(\frac{4}{n}\right)^3$ 4. _____
5. $\left(-\frac{3}{b}\right)^3$ 5. _____
6. $\left(\frac{m}{5}\right)^3$ 6. _____