

Basic Principal of Rational Numbers

If $\frac{a}{b}$ is a rational number and c is a nonzero real number, then $\frac{ac}{bc} = \frac{a}{b}$.

Strategy for Reducing Rational Expressions

1. Factor the numerator and denominator completely and look for common factors.
2. Divide out the common factors.
3. In a ratio of two monomials with exponents, the quotient rule for exponents is used to divide out the common factors.
4. You may have to use a negative sign with the greatest common factor to get any identical factors.