Factoring a Monomial from a Polynomial

To **factor an expression** means to write the expression as a product of its factors.

To factor a monomial from a polynomial, we use the following steps:

- Write each term as a product of its prime factors.
- Determine the greatest common factor (GCF) by underlining the common factors of each term in the polynomial.
- Then use the distributive property to factor out the GCF.

Example: Factor $6y^2 + 9y^5$

$2*3*y*y + 3*3*y*y*y*y*y$, GCF is $3y^2$

$= 3y^2(2 + 3y^3)$