Review–Overview of Simplification of Algebraic Expressions

Situation	Important Concepts to Keep in Mind	Example: Fully Simplify the Given Expression
Add/Subtract Polynomial Expressions *without* Brackets		$-13x^2y - 7xy + 12x^2y - 8xy$
Add/Subtract Polynomial Expressions *with* Brackets		$-\left(13x^2y - 7xy\right) - \left(12x^2y - 8xy\right)$
Multiply Monomials		$\left(-13x^2y\right)\left(-7xy\right)\left(+12x^2y\right)\left(-8xy\right)$

Situation	Important Concepts to Keep in Mind	Example: Fully Simplify the Given Expression
Multiply/Divide Monomials		$$\dfrac{27p^{11}q^2\left(-pq^5\right)}{3^{-2}\left(3^{-5}p^3q^{-1}\right)^{-1}\left(482pqr\right)^0}$$
Multiply a Monomial by a Polynomial		$-2b^{-3}\left(5a^2b^3+3a^3b^6\right)-7ab^{-6}\left(6a^2b^9-ab^6\right)$