In[607]:=

$$\frac{(x^4 + y^4 + x^2\,y^2)}{(x^2 + y^2 - x^2\,y^2)};$$

Takes a set of polynomials, and reduces this set to a canonical form from which many properties can conveniently be deduced.

In[610]:= **GroebnerBasis$\left[\{x^4 + y^4 + x^2\,y^2,\ x^2 + y^2 - x^2\,y^2\},\ \{x,\ y\}\right]$**

Out[610]= $\{y^4 - y^6 + y^8,\ x^2 + y^2 + y^6\}$

In[612]:= $\dfrac{y^4 - y^6 + y^8}{x^2 + y^2 + y^6};$

Here is the resultant with respect to x of two polynomials in x and y

In[615]:= **Resultant$\left[y^4 - y^6 + y^8,\ x^2 + y^2 + y^6,\ x\right]$**

Out[615]= $(y^4 - y^6 + y^8)^2$

$$y^8 - 2\,y^{10} + 3\,y^{12} - 2\,y^{14} + y^{16}$$