# Algebra II <br> 4-1 <br> Polynomials 

Label the parts of the following Polynomial.

$$
3 x^{3} y^{3}-5 x^{2} y^{4}+2 x y^{3}-7
$$

Which of the following do you think are like terms?

$$
\begin{array}{lll}
3 x^{4} & -2 x^{2} y^{3} & y^{4} \\
5 x^{3} y^{4} & 7 y^{3} x^{2} & 6 \\
4 x^{3} & -8 x^{3} y^{2} & 9 y^{4}
\end{array}
$$

What do you think is the degree of each monomial?

$$
8 x^{3} \longrightarrow
$$

$\qquad$

$$
6 x^{5} y \longrightarrow
$$

$\qquad$

What do you think is the degree of this Polynomial?

$$
3 x^{5} y^{4}-9 x^{3} y^{4}+11 x y^{7} \longrightarrow
$$

Simplify, arranging terms in order of decreasing degree ofx. Then write the degree of the polynomial.

1) $2-x^{2}+3 x+2 x^{2}-5 x$
a) add the polynomials and $\mathbf{b}$ ) subtract the second polynomial from the first. 9) $5 m-4,2 m+3$

Assignment:
Pg. 170
1-27 all

