NCM1B Unit 2 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Date:

**Homework Lesson 1: Introduction to Polynomials**

***For each problem below, write the letter of the monomial that represents a like term.***

1.) $a^{2}b$ A. $6x^{2}$

2.) $3xy$ B. $bac$

3.) $abc$ C. $n^{2}m$

4.) $6x$ D. $ba^{2}$

5.) $x^{2}$ E. $\frac{1}{2}x$

6.) $m^{2}n$ F. $4xy$

7.) $-9mn^{2}$ G. $5nm^{2}$

***Determine if each expression is a monomial. Then, explain why using the definition of monomial.***

 *yes/no Explanation*

8.) $5xy^{2}z$

9.) $\frac{16x}{y}$

10.) $22$

11.) $a^{3}$

12.) $\sqrt{5}$

13.) $\sqrt{2x}$

14.) $cd$

***Determine the degree of each polynomial and name the polynomial based on the number of terms.***

15.) $2p^{4}+p^{3}$ 16.) $-10a$ 17.) $2x^{2}$

degree type of poly degree type of poly degree type of poly

18.) $-5n^{4}+10n-10$ 19.) $-10k^{2}+7$ 20.) 1

degree type of poly degree type of poly degree type of poly

*Arrange the following polynomials in descending order*

21.) $2x^{4}-6x^{3}+x^{5}$ 22.) $3x^{7}-2x^{8}+5x^{9}$