Algebra 1 1. Define the wo		Sec 9-1	Polynomials	Spring 2015	Name:		
2. Give four examples of monomials that aren't in the book.							
a. 3. How do you fi	b. nd the degree of a	a monomi	c. al?		d.		
4. State the degr a) 5a ⁴ b ⁶ degree=	ee of each mono b	mial:) –12 <i>R⁶M</i> degree=	1	c) 83 degree=			
5. Define the word POLYNOMIAL:							
6. What is Standard Form of a polynomial in one variable?							
7. Put each polynomial into Standard Form: a) $-5x + 3x^2 + 7 - x^3$ b) $9m^2 + 3m^4 - 2m + m^2$ c) $2w^3 - w(w+3) + 3w^2 + 3w^4 - 2w + m^2$					$(w+3) + w^2$		
8. What is the degree of a polynomial in one variable?							
9. State the degree of each polynomials from question 7.							
a) degree=		b)	degree=	c) de	egree=		

10. Terms of a polynomial are separated by what math symbols?

11. Polynomials are given names because of their degree and because of the number of terms. Fill in the spaces using the proper names.

Degree of Polynomial	Name because of Degree
0	
1	
2	
3	
4	

# of terms in polynomial	Name because of # of terms
1	
2	
3	

Do the back too!

For each polynomial do the following:

a. Write the polynomial in standard form. First simplify by using Distributive Property and combining like terms.

- b. State the degree of the polynomial.
- c. Name the polynomial using its degree.
- d. Name the polynomial using the number of terms.

12. $4 - 8y^3 + 7y$ a.	13. $6a + 7a^2 - 4 + 8a - a^2$ a.
b.	b.
с.	с.
d.	d.
14. $9(2-c) + 2c(3c+7)$ a.	
b.	
С.	
d.	

Find the sum or difference of each pair of polynomials.

15. $(4n^3 - 3n^2 + 7) - (6n^3 + 8n - 3)$ 16. $(e^2 + 6e - 9) + (3e - 4e^2 + 2)$