<b>NOTES:</b> Today is all about factoring with	terms.	
To factor with four terms, we will u	use something called Factoring	by
Step 1: Group the	terms together and	d group the terms together.
Step 2: Factor out the	from each	(Remember, binomial means two terms!
Step 3: Factor out the	binomial.	
Step 4: Write in the form	·	
Factor the follow	Method 2: Factoring ing example problems by grou	by Grouping ping. (Notice they all have four terms!)
1) $x^3 + 4x^2 + 8x + 32$		$a^3 + 2a^2 + 9a + 18$
,	,	
3) $w^3 + 5w^2 - 8w - 40$	4) 1	$v^3 - v^2 - 3v + 3$
$5) 16a^3 + 8a^2 - 6a - 3$	6) 1	$10m^3 - 25m^2 + 4m - 10$
7) $a^3 + a^2b + ab + b^2$	8) (	$9y^3 + 18y^2 + y + 2$
7,4 1 4 5 1 45 1 5		y 110y 1 y 1 2

Name: \_\_\_\_\_

Algebra 1 Ch 8 Factoring and Quadratic Equations

8.2 Factoring by Grouping

Algebra 1
Ch 8 Factoring and Quadratic Equations
8.2 Factoring by Grouping

## **HOMEWORK ASSIGNMENT:**

Factor the following example problems by grouping.

Remember you can check your answers using the distributive property.

1) $x^3 + x^2 + 2x + 2$	2) $x^3 + 4x^2 + 2x + 8$	3) $7k^3 - 35k^2 + 6k - 30$
	2/2 1 12 1 22 1 0	37711 3311 1 311 30
4) $2m^3 - 6m^2 - 3m + 9$	$5) 10x^2 + 2xy - 15x - 3y$	6) $9x^2 - 3xy + 6x - 2y$
.,		
7) $4n^3 + 3n^2 + 4n + 3$	8) $10a^3 + 4a^2 + 5a + 2$	9) $4m^2 + 16mn - 7m - 28n$
1 7 1 10 1 5 10 1 110 1 5	10/104   14   54   2	1 3) 1110 1 1011010 7110 2010
•		
$10) 2x^3 + x^2y - 6xy^2 - 3y^3$	$11) \ 20v^3 - 8v^2 + 15v - 6$	$12)  5x^2y - x^2 + 5y - 1$