

**7.2 Factoring Review**

<b>What you need to know &amp; be able to do</b>	<b>Things to remember</b>	<b>Examples</b>	
1. Factor by GCF	-Break down each term and circle what factors are common to both (that comes out)  -What is leftover stays in the parenthesis	1. $x^2 - 12x$	2. $-8y^2 - 2y$
2. Factor a = 1	Always check for a GCF first!  Think of what two factors multiply to get the "c" term and add to get the "b" term	3. $x^2 - 15x + 44$	4. $x^2 + 5x - 36$
		5. $x^2 - 9$	6. $x^2 - 12x + 36$
3. Factor A not 1	Always check for a GCF first!	7. $2x^2 + 9x + 4$	8. $4x^2 - 4x - 3$

4. Factor a = 1 & GCF	Always check for a GCF first!	9. $6x^2 - 54x + 48$	10. $x^3 + 10x^2 + 24x$
5. Factor a not 1 & GCF	Always check for a GCF first!	11. $6x^2 + 8x - 8$	12. $4x^2 + 2x - 2$
6. Special Products	Difference of Two Squares: $a^2 - b^2 = (a + b)(a - b)$ "b" term = 0  Perfect Square Trinomial: $(a + b)^2 = a^2 + ab + b^2$  $(a - b)^2 = a^2 - ab + b^2$	13. $x^2 - 49$	14. $25x^2 - 9$
		15. $4x^2 - 1$	16. $x^2 - 10x + 25$
7. Area & Perimeter	Perimeter: Add up all outside sides  Area: Rectangle: $A = l \times w$ Triangle: $A = \frac{1}{2}bh$	17. The area of a rectangle is $x^2 + 7x + 6$ . What is the <b>perimeter</b> of this rectangle?	

**Make sure you know your graphic organizer so you know which method to use to factor.**