**Algebra 1 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Unit 3A – Factoring Review Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block:\_\_\_\_\_\_\_\_**

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| **What you need to know & be able to do** | **Things to remember** | **Examples** | |
| 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. x2 – 12x | 2. -8y2 – 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. x2 – 15x + 44 | 4. x2 + 5x - 36 |
| 5. x2 – 9 | 6. x2 – 12x + 36 |
| 3. Factor A not 1 | Always check for a GCF first!  Use Area Model | 7. 2x2 + 9x + 4 | 8. 4x2 – 4x – 3 |
| 4. Factor a = 1 & GCF | Always check for a GCF first! | 9. 6x2 – 54x + 48 | 10. x3 + 10x2 + 24x |
| 5. Factor a not 1 & GCF | Always check for a GCF first! | 11. 6x2 + 8x - 8 | 12. 4x2 + 2x – 2 |
| 6. Special Products | Difference of Two Squares:  a2 – b2 = (a + b)(a – b)  “b” term = 0  Perfect Square Trinomial:  (a + b)2 = a2 + ab + b2  (a – b)2 = a2 – ab + b2 | 13. x2 – 49 | 14. 25x2 – 9 |
| 15. 4x2 - 1 | 16. x2 – 10x + 25 |
| 7. Area & Perimeter | Perimeter: Add up all outside sides  Area:  Rectangle: A = l x w  Triangle: A = ½bh | 17. The area of a rectangle is x2+ 7x + 6.What is the **perimeter** of this rectangle? | |

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