Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Block Algebra/Algebra I

Factoring Completely w/GCF’s

The inverse operation of factoring is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Review: Factor each expression.

1. x2 + 3x + 2 2. x2 -10x + 9

3. x2 + x – 12 4. x2 – 49

Find the GCF:

5. 3x3 – 9x2 + 27x 6. -x5 + 5x3 - 2x2

Factor out the GCF.

7. 3x2 + 15x + 12 8. 2x3 – 32x

9. 6x2 - 48x – 42 10. -4x2 - 16x -16

**After we factor out the GCF, we must check that both factors are completely factored!**

11. Look at the expressions left in the parenthesis in #7-10. Can any of these expressions be factored further? Is so, which one(s)?

Factor COMPLETELY!

12. 3x2 + 18x + 24 13. 7x2 + 49x + 42

14. 4x2 – 8x - 192 15. 6x2 – 6x - 72

16. 11x2 + 22x – 88 17. 20x2 + 40x - 960

18. 3x3 – 75x 19. 7x2 - 28

20. 3x3 – 75x 21. 7x2 – 28