**Assignment: Factoring Trinomials (GCF + a ≥ 1)**

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

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_

**Factor completely. Show Work!**

1. $3x^{2}+4x+1$ 2. $24x^{2}+34x+12$

3. $x^{2}-7x-8$ 4. $x^{2}+4x-32$

5. $5x^{2}-2x-7$ 6. $x^{3}-4x^{2}-5x$

7. $2x^{2}+8x+6$ 8. $4x^{2}+16x+16$

9. $2x^{2}-11x+5$ 10. $x^{2}+9x+18$

11. $x^{2}-14xy+24y^{2}$ 12. $8x^{2}-10x+3$

13. $24x^{2}-30x+9$ 14. $x^{2}+12x+20$

**Review: Simplify.**

15. $x^{2}(-2xy)(4y^{5})$ 16. $(4xy^{2})^{3}(2x^{2}y)^{2}$ 17. $\frac{56a^{2}b^{3}}{4a^{2}b}$

18. $\frac{8xy^{2}}{16x^{3}y^{5}}$ 19. $\left(\frac{4a^{2}}{b^{3}}\right)^{-3}$ 20. $x^{6}-216$