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

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

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

**Factor completely. Show Work!**

1. $x^{2}+2x-3$ 2. $x^{2}+2xy+15y^{2}$

3. $x^{2}-20x+51$ 4. $5x^{3}-35x^{2}+50x$ $x^{2}-14xy+24y^{2}$

5. $x^{2}+10x+21$$x^{2}-7x-8$ 6. $x^{2}+6x-72$

7. $3x^{2}+21xy-54y^{2}$ 8. $x^{2}+17x+30$

9. $x^{2}+7x-30$$x^{2}+4x-32$ 10. $x^{2}-6x+8$

11. $x^{2}-14x-15$$x^{2}-2x-15$ 12. $3x^{2}-27x-270$

13. $2x^{2}+22x+48$ 14. $x^{2}-11xy-60y^{2}$

**Review:**

15. Divide using long division. 16. Divide using synthetic division.

$\left(x^{2}+7x+12\right)÷\left(x+3\right)$ $\left(4x^{2}+7x+5\right)÷\left(x-2\right)$

**Factor.**

17. $x^{3}-343y^{3}$ 18. $8a^{3}-729$ 19. $4x^{2}-144$