Name:_____ Date:_____

PC: Factoring using Substitution Ms. Loughran

Factor each of the following completely.

1. $(5a+1)^2-2(5a+1)-3$

2. $(a^2+1)^2-7(a^2+1)+10$

3. $(a^2+2a)^2-2(a^2+2a)-3$

4. $(3x+2)^2+8(3x+2)+12$

5. $2(a+b)^2+5(a+b)-3$

6. $(a+2)^2-12(a+2)+32$

7. $3(x+5)^2+7(x+5)-10$

8. x^4+4x^2+4

9. x^4-x^2-12

10. x^4-2x^2+1

11. $(x+1)^2-4$

12. $x^2(x-1)-2x(x-1)+(x-1)$

13. $8x^2(x-1)+4x(x-1)+2(x-1)$