

Name: _____
A2H: Factoring using Substitution Homework

Date: _____
Ms. Loughran

Factor each of the following completely.

1. $(2a+1)^2 - 6(2a+1) + 8$

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

3. $(a^2 + 3a)^2 + 4(a^2 + 3a) + 4$

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

5. $3(x+y)^2 - 5(x+y) - 2$

6. $2(a+2)^2 + 5(a+2) - 12$

7. $3(x+3)^2 - 13(x+3) + 10$

8. $x^4 + 2x^2 + 1$

9. $x^4 - 3x^2 - 10$

10. $x^4 - 17x^2 + 16$

11. $(x+2)^2 - 16$

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

13. $12x^2(x-2) + 12x(x-2) + 3(x-2)$