

Name: \_\_\_\_\_

Date: \_\_\_\_\_

PC: Factoring Practice

Ms. Loughran

Factor each of the following polynomials completely.

1.  $121x^2 - 36$

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

2.  $3x^3 - 12x^2 - 36x$

14.  $9 - 4x^2$

3.  $16x^3 + 128$

15.  $9x^2 - 24x - 9$

4.  $160x^3 - 810x$

16.  $4x^2 - 29x + 30$

5.  $x^3 + 2x^2 + x$

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

6.  $24x^3 + 8x^2 + 24x + 8$

18.  $8x^3 - 125$

7.  $3x^3 + 2x^2 - 3x - 2$

19.  $49x^2 - 64y^2$

8.  $-x^3 - 8$

20.  $(x+1)^2 - 2(x+1) - 24$

9.  $x^2 + 18x + 81$

21.  $x^4 - 3x^2 - 18$

10.  $1 - x^3$

22.  $2(x^2 + 1)^2 + (x^2 + 1) - 3$

11.  $9x^2 + 30x + 25$

23.  $2x^3 - 16x^2 + 32x$

12.  $6x^2 + x - 1$

24.  $18x^3 + 24x^2 + 6x$