

Name:

ILP#:

Turn in with your Unit 2 Assignment if your instructor accepts Activities

**Math D Unit 2 Activity - Factoring Practice– 10 points**

**Summary of Approach to Factoring:**

**Step 1:** Look for GCF and factor it out if there is one.

**Step 2:** Count the number of terms. IF there are

2 terms: Try Difference of Squares, or Sum or Difference of Cubes

3 terms: Trial and error, or Convert to 4 terms and Factor by Grouping

4 terms: Factor by Grouping

**Step 3:** Look for further opportunities to factor.

Note: If *none* of the above is possible, then write *Prime*.

**Now Factor Completely:**

- |                            |                           |
|----------------------------|---------------------------|
| 1. $10x^2y - 15xy^2$       | 11. $6x^3 + 6$            |
| 2. $13m + 26m^2 - 39m^3$   | 12. $1 - 8u + 16u^2$      |
| 3. $2y(x + 3) - 3(x + 3)$  | 13. $16x^2 + 24x + 9$     |
| 4. $6xy + 2x + 15y + 5$    | 14. $b^2 + 7b - 18$       |
| 5. $8t^3 + 12t^2 - 2t - 3$ | 15. $45 + 14y + y^2$      |
| 6. $x^2 + 4$               | 16. $3a^2 - 5a - 2$       |
| 7. $4a^2 - 81b^2$          | 17. $4y^2 + 19y - 5$      |
| 8. $a^2b - b^3$            | 18. $3a^2 - 14a - 5$      |
| 9. $y^8 - 81$              | 19. $x^2 - xy - 12y^2$    |
| 10. $27t^3 - 8$            | 20. $3x^2 + 21xy - 54y^2$ |