

Name:

Due Date:

ILP#: Math A Unit 4 Activity – Mixed Factoring Review

Turn in with your Unit 4 Homework for credit (10 points)

Summary of Approach to Factoring:

Step 1: Look for GCF and factor it out if there is one. (Factor out negative if the first term is negative.)

Step 2: Count the number of terms. If there are

2 terms: Try Difference of Squares

3 terms: Magic Numbers/Reverse FOIL if $a=1$, or Trial and Error if not

4 terms: Factor by Grouping

Step 3: Look for further opportunities to factor, such as a difference of squares pattern.

NOTE: If none of the above steps is possible, write “Prime.”

Now Factor Completely: (* means requires more than one step to factor completely)

1. $10x^2y - 15xy^2$

7. $y^2 - 81$

14. $x^2 + 4$

2. $b^2 + 7b - 18$

8. $a^2b - b^3$ *

15. $3a^2 - 5a - 2$

3. $y^2 - 11y + 24$

9. $4a^2 - 81b^2$

16. $6x^2 + x - 35$

4. $6xy + 2x + 15y + 5$ *

10. $6x^2 - 150$ *

17. $4y^2 + 19y - 5$

5. $8t^3 + 12t^2 - 2t - 3$ *

11. $16u^2 - 8u + 1$

18. $3a^2 - 14a - 5$

6. $x^2 + 3ax - 2bx - 6ab$ *

12. $16x^2 + 24x + 9$

19. $x^2 - xy - 12y^2$

13. $-39m^3 + 26m^2 + 13m$ *

20. $3x^2 + 21xy - 54y^2$