YL Honors Math 2 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit 1 Lesson 5 Homework: Factoring Using Greatest Common Factor and Difference of Two Squares**

**Factor Completely – If the polynomial cannot be factored write PRIME.**

1. $9x^{2}+36x+18$ 2. $16p^{2}-1$ 3. $2x^{2}-16$

4. $81x^{3}-9y$ 5. $64+49y^{2}$ 6. $\frac{9}{64}x^{2}-49y^{2}$

7. $32x+14y+18z$ 8. $10x^{2}+15x$ 9. $2k^{2}m^{3}+6km^{2}+10k^{3}m^{4}$

10. $-36x^{2}+1$ 11. $8x^{2}-4y^{2}$ 12. $(x+3)^{2}-y^{2}$

13. $36a^{2}-49$ 14. $2a^{8}-162$ 15. $100-y^{4}$

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