Principles of Algebra   Name/Date_____

WS 12C.1 – Factoring by Difference of Two Squares

Factor each binomial by the Difference of Two Squares Method. If a binomial does not factor, write "prime."

1. $y^2 - 121$	2. $121 - y^2$	3. $x^2 - 100$	4. $x^2 + 100$
5. $m^6 - 49$	6. $n^{10} - 25$	7. $n^{30} - 1$	8. $4 - a^8$
9. $x^4y^2 - 81$	10. $25g^2 - 16$	11. $4z^2 - 9$	12. $p^9 - 64$
13. $144w^2 - 121r^{12}$	14. $1 - x^{14}y^{20}$	15. $k^2 + 4$	16. $j^{60}k^{50} - 9x^{100}$
17. $9n^4 - 49m^2$	18. $36x^{36} - y^2z^8$	19. $64x^2 - 81y$	20. $a^2 - b^2$

Factor each polynomial by Difference of Two Squares or by GCF. If a binomial does not factor, write "prime."

21. $9x^2 + 36$	22. $14j^3 - 28j^2$	23. $121y^4 - 100z^{100}$
24. $10x^3y^5 - 20x^4y^3 + 15x^5y^2$		25. $18j^{10}k^8m^{15} - 60j^{12}k^6m^{10} + 6j^8k^5m^9$