Algebra 1 B **Name _____**

Unit 11 Objective 5 Practice **Period _____ Date _____**

Factor each polynomial. If it is not factorable, write prime.

1. $x^2 + 2x - 8$ 1. _____

2. $x^2 - x - 2$ 2. _____

3. $x^2 - 16$ 3. _____

4. $x^2 + 6xy + 9y^2$ 4. _____

5. $x^2 + 12x + 27$ 5. _____

6. $3x^2 - xy$ 6. _____

7. $x^2 + 3x - 40$ 7. _____

8. $x^2 + 2x - 15$ 8. _____

9. $4x^2 - y^2$ 9. _____

10. $x^2 - 3x - 10$ 10. _____

11. $x^2 - 5xy - 6y^2$ 11. _____

12. $8x^2y^3 - 10xy^2$ 12. _____

13. $x^2 + 4$ 13. _____

14. $x^2 - 8xy + 15y^2$ 14. _____

15. $x^2 - 10x + 25$ 15. _____

16. $1 - 64x^2$ 16. _____

17. $x^2 + 5xy + 3y^2$ 17. _____

18. $12x^8 + 24x^5 - 4x^3$ 18. _____

19. $x^2 - 20xy + 100y^2$ 19. _____

20. $x^2 - 9x + 8$ 20. _____

21. If $x - 13$ is a factor of $x^2 - 9x - 52$, what is the other factor?

22. If $x - 9y$ is a factor of $x^2 - 16xy + 63y^2$, what is the other factor?

23. If $x + 4$ is a factor of $x^2 - 16$, what is the other factor?

24. What is the greatest monomial factor of $32x^3y^4 - 56x^4y^3$?