Secondary 2H **Name**_____ **Desk** _____

Unit 3 **Factoring (4.1)**

Score _____

Factor using the method of your choice. If the polynomial cannot be factored, write prime.

1. $5h^2 + 3h - 14$

2. $3m^2 - 5m + 2$

3. $7g^2 + 40g - 2$

4. $2x^2 + 11x + 5$

5. $5p^2 + 6p - 8$

6. $3y^2 - 16y - 35$

7. $14j^2 + 29j + 12$

8. $14x^2 + 11x - 15$

9. $24h^2 - 47h + 20$

10. $15m^2 + 44mp + 21p^2$

11. $9g^2 + 27gh + 20h^2$

12. $14y^2 - 31yz + 15z^2$

13. $4d^2 + 10d + 25$

14. $x^2 - 20x + 100$

15. $4x^2 - 12x + 9$

16. $100p^2 + 60p + 9$

17. $25j^2 + 120j + 144$

18. $4s^2 - 4st + t^2$

19. $9r^2 - 6r + 1$

20. $36s^2 - 12s - 1$

21. $16a^2 - 56ab + 49b^2$

22. Charlie and Linus both factored the expression $2y^2 + 7y - 15$. Charlie's answer: $(2y - 3)(y - 5)$ and Linus' answer: $(2y - 3)(y + 5)$. Which student factored incorrectly and explain the error.

23. Sally and Lucy both factored the expression $3m^2 - 7m - 6$. Sally's answer: $(3m - 2)(m + 3)$ and Lucy's answer: $(3m + 2)(m - 3)$. Which student factored incorrectly and explain the error.

24. Marcie and Pattie both factored the expression $4m^2 + 4m - 3$. Marcie's answer: $(2m - 1)(2m + 3)$ and Pattie's answer: $(4m - 3)(m + 1)$. Which student factored incorrectly and explain the error.