Name _____ Date _____ Class _____

LESSON 8-4

Practice A

Factoring $ax^2 + bx + c$

Factor each trinomial, where *c* is positive.

1. $5x^2 + 17x + 6$

$(x + 3)(5x + \quad)$

2. $4x^2 + 16x + 15$

$(x + \quad)(x + \quad)$

3. $3x^2 + 17x + 20$

_____

4. $6x^2 + 19x + 10$

_____

5. $8x^2 + 18x + 7$

_____

6. $8x^2 + 19x + 3$

_____

7. $4x^2 - 33x + 8$

$(4x - \quad)(x - \quad)$

8. $9x^2 - 27x + 14$

$(x - \quad)(x - \quad)$

9. $6x^2 - 25x + 25$

_____

10. $5x^2 - 22x + 8$

_____

11. $21x^2 - 22x + 5$

_____

12. $12x^2 - 25x + 12$

_____

Factor each trinomial, where *c* is negative.

13. $10x^2 + 13x - 9$

$(5x + \quad)(x - 1)$

14. $3x^2 + x - 4$

$(x + \quad)(x - \quad)$

15. $5x^2 + 7x - 6$

_____

16. $4x^2 - 9x - 9$

_____

17. $4x^2 - 12x - 7$

_____

18. $6x^2 - 7x - 20$

_____

Factor each trinomial, where *a* is negative.

19. $-5x^2 - 48x - 27$

$-1(\quad)$

$-1(x + \quad)(x + \quad)$

20. $-6x^2 + 11x - 4$

$-1(x - \quad)(x - \quad)$

21. $-20x^2 + 7x + 6$

_____

22. The area of a rectangle is $8x^2 + 14x + 3$. The length is $2x + 3$. The width is _____.