Name _____

7-5 Additional Practice

Factoring $x^2 + bx + c$

Write the factored form of each trinomial.

1. $x^2 + 7x + 10$

2. $x^2 + 13x + 30$

3. $x^2 + 12x + 32$

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

5. $x^2 - 14x + 45$

6. $x^2 - 17x + 52$

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

8. $x^2 + x - 42$

9. $x^2 - 4x - 60$

10. $x^2 + 12xy + 27y^2$

11. $x^2 - 18xy + 56y^2$

12. $x^2 - xy - 42y^2$

13. $x^2 - 22xy + 85y^2$

14. $x^2 + 15xy - 76y^2$

15. $x^2 + 16xy + 55y^2$

16. Suppose you want to factor the expression $x^2 + 2xn + n^2$. Given that $n > 0$, what are the factors? Explain.

17. A parallelogram has an area of $x^2 + 9x - 36$.

a. What are expressions for the length and width of the parallelogram?

b. If x is an integer, what is the least possible value of x for a parallelogram to exist? Explain.