Write each trinomial in factored form (as the product of two binomials).

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

2. $x^2 - 5x - 24$

3. $x^2 + 5x - 36$

4. $x^2 + 15x + 56$

5. $x^2 + 15x + 54$

6. $x^2 - 8x - 20$

7. $x^2 + 4x - 32$

8. $x^2 - x - 20$

9. $x^2 + 11x + 30$

10. $x^2 + 14x + 49$

11. $x^2 + 10x + 16$

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

13. $x^2 + 23x + 132$

14. $x^2 - 6x - 135$

15. $x^2 + 15x + 44$

16. A rectangular room has an area of $x^2 + 34x + 280$. What are the lengths and widths of the room?