Complete The Square

Complete the Square for the variable x.

1. $y = x^2 + 6x + 4$
2. $y = x^2 - 6x + 2$
3. $y = x^2 - 4x + 1$
4. $y = x^2 - 4x - 1$
5. $y = x^2 + 8x - 3$
6. $y = x^2 + 12x + 5$
7. $y = x^2 - 2x + 5$
8. $y = x^2 + 6x + 3$
9. $y = x^2 + 10x - 3$
10. $y = x^2 - 10x + 5$
11. $y = x^2 - 12x - 8$
12. $y = x^2 + 12x - 6$
13. $y = 2x^2 + 4x - 1$
14. $y = 3x^2 - 6x + 5$
15. $y = 3x^2 - 24x + 49$
16. $y = 2x^2 + 12x + 17$
17. $y = -x^2 - 2x + 2$
18. $y = -x^2 + 4x - 3$
19. $y = -x^2 - 6x - 5$
20. $y = -x^2 - 4x - 5$
21. $y = -2x^2 - 4x + 2$
22. $y = -3x^2 + 24x - 39$
23. $y = -3x^2 - 16x + 3$
24. $y = -4x^2 + 16x - 17$

Solve the following equations for x by Completing the Square.

25. $x^2 + 6x + 4 = 0$
26. $x^2 - 6x + 2 = 0$
27. $x^2 - 4x + 1 = 0$
28. $x^2 - 4x - 1 = 0$
29. $x^2 + 8x - 3 = 0$
30. $x^2 + 12x + 5 = 0$
31. $x^2 - 2x + 5 = 0$
32. $x^2 + 6x + 3 = 0$
33. $x^2 + 10x - 3 = 0$
34. $x^2 - 10x + 5 = 0$

35. $x^2 - 12x - 8 = 0$

36. $x^2 + 12x + 6 = 0$

37. $2x^2 + 4x - 1 = 0$

38. $3x^2 - 6x + 5 = 0$

39. $3x^2 - 24x + 49 = 0$

40. $2x^2 + 12x + 17 = 0$

41. $-x^2 - 2x + 2 = 0$

42. $-x^2 + 4x - 3 = 0$

43. $-x^2 - 6x - 5 = 0$

44. $-x^2 - 4x - 5 = 0$

45. $-2x^2 - 4x + 2 = 0$

46. $-3x^2 + 24x - 39 = 0$

47. $-3x^2 - 16x + 3 = 0$

48. $-4x^2 + 16x - 17 = 0$