

Solve each equation.

35. $15x^2 - 84x - 36 = 0$

36. $12x^2 + 13x - 14 = 0$

37. $12x^2 - 108x = 0$

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

39. $x^2 - 5x - 24 = 0$

40. $x^2 = 121$

41. $x^2 + 17 = 13$

42. $-3x^2 - 10x + 8 = 0$

43. $-8x^2 + 46x - 30 = 0$

- 44. GEOMETRY** The hypotenuse of a right triangle is 1 centimeter longer than one side and 4 centimeters longer than three times the other side. Find the dimensions of the triangle.

4 Solve each equation by completing the square.

26. $x^2 - 4x + 12 = 0$

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

32. $2x^2 + 5x + 7 = 0$

35. $x^2 + 4x + 11 = 0$

38. $3x^2 - 4x = 2$

41. $x^2 - 5.3x = -8.6$

27. $x^2 + 2x - 12 = 0$

30. $2x^2 + x - 3 = 0$

33. $3x^2 - 6x - 9 = 0$

36. $x^2 - 6x + 18 = 0$

39. $2x^2 - 7x = -12$

42. $x^2 - \frac{1}{5}x - \frac{11}{5} = 0$

28. $x^2 + 6x + 8 = 0$

31. $2x^2 - 3x + 5 = 0$

34. $x^2 - 2x + 3 = 0$

37. $x^2 - 10x + 29 = 0$

40. $x^2 - 2.4x = 2.2$

43. $x^2 - \frac{9}{2}x - \frac{24}{5} = 0$