Solve the following Quadratic Equations by the method of factoring

For 1 – 12, solve for x.

1. $x^2 + 10x + 21 = 0$	**2.** $x^2 - 7x + 10 = 0$
3. $x^2 - 4x = 0$	**4.** $7x^2 + 14x = 0$
5. $25x^2 - 9 = 0$	**6.** $4x^2 - 81 = 0$
7. $3x^2 - 13x + 14 = 0$	**8.** $2x^2 - x - 15 = 0$
9. $5x^2 - 3x - 14 = 0$	**10.** $14x^2 + 11x - 15 = 0$

11. $5x^2 - 52x - 33 = 0$	**12.** $3x^2 - 46x + 15 = 0$

For 13 – 22, put in standard form and solve for x.

13. $5x^2 = 45$	**14.** $10x^2 = 250$
15. $5x^2 = -15x$	**16.** $21x^2 = 35x$
17. $x^2 + 4x = 21$	**18.** $5x^2 - 6x = 8$

19. $3x^2 - 13x = -14$	**20.** $2x^2 - 17x = 55$
21. $7x^2 + 41x = 6$	**22.** $5x^2 - 6 = -13x$

Answers:

1. $-7, -3$	**2.** $5,2$	**3.** $0,4$	**4.** $0, -2$
5. $-\frac{3}{5}, \frac{3}{5}$	**6.** $-\frac{9}{2}, \frac{9}{2}$	**7.** $\frac{7}{3}, 2$	**8.** $-\frac{5}{2}, 3$
9. $-\frac{7}{5}, 2$	**10.** $-\frac{3}{2}, \frac{5}{7}$	**11.** $-\frac{3}{5}, 11$	**12.** $\frac{1}{3}, 15$
13. $3, -3$	**14.** $5, -5$	**15.** $0, -3$	**16.** $0, \frac{5}{3}$
17. $3, -7$	**18.** $-\frac{4}{5}, 2$	**19.** $\frac{7}{3}, 2$	**20.** $-\frac{5}{2}, 11$
21. $\frac{1}{7}, -6$	**22.** $\frac{2}{5}, -3$		