Solving Equations

Solve for x in the following equations:

1. $x - 4 = 10$
2. $2x - 4 = 10$
3. $3x + 7 = 19$
4. $10 - 4x = 30$
5. $-18.1 = 3.5x + 9.2$
6. $5x - 6 = 3x - 8$
7. $9x + 4 = 3x + 34$
8. $5x - 2 = 7x - 8$
9. $4x + 7 = 7x + 25$
10. $7x - 1 = -19 - 2x$
11. $\frac{3}{4}x + \frac{5}{6} = 5x - \frac{125}{3}$
12. $\frac{7}{6}x - \frac{2}{3} = \frac{2}{5}x + \frac{13}{15}$

13. $\frac{9}{2}x + \frac{7}{5} = \frac{3}{8}x - \frac{439}{40}$

14. $2(3x - 7) + 4(3x + 2) = 6(5x + 9) + 3$

15. $2(3x - 7) - 4(5x - 3) = 5(x - 27)$

16. $-7(4x - 2) = 9(x - 6) - 7(x - 29)$

17. $\frac{6x - 7}{4} + \frac{3x - 5}{7} = \frac{5x + 78}{28}$

18. $\frac{3x - 2}{5} + \frac{6x - 7}{12} = \frac{9(x - 30) - 17}{60}$

19. $\frac{2(x - 1)}{3} - \frac{5(2x - 3)}{4} = \frac{4x + 1}{2} + \frac{8x}{6}$

20. $\frac{3}{x + 5} + \frac{7}{9} = \frac{37}{36}$

Solution: 1) $x = 14$, 2) $x = 7$, 3) $x = 4$, 4) $x = -5$, 5) $x = -7.8$, 6) $x = -1$, 7) $x = 5$, 8) $x = 3$, 9) $x = -6$, 10) $x = -2$, 11) $x = 10$, 12) $x = 2$, 13) $x = -3$, 14) $x = -\frac{21}{4}$, 15) $x = 7$, 16) $x = -5$, 17) $x = 3$, 18) $x = -4$, 19) $x = 0.5$, 20) $x = 7$,