Algebra 101 exam 1

1 Linear equations

Solve the following equations for the specified variable.

1. Solve for W : $Wv + k = DW + D$

2. Solve for C : $CS + 23 = CJ + 23$

3. Solve for r : $n + r = Ar + g$

4. Solve for x : $Px + 10 = -22x + 24$

5. Solve for A : $-5A - 12 = -10A + z$

6. Solve for R : $H + 20R = NR + N$

7. Solve for M : $-8M + 22 = 23M - 9$

8. Solve for M : $D + Mk = -16M - 26$

9. Solve for Z : $23Z + s = Ze + 6$

10. Solve for Q : $-4Q + 18 = A - 20Q$

11. Solve for j : $R + jk = Mj - 24$

12. Solve for N : $13N - 22 = CN - 6$

13. Solve for j : $Mj - 15 = Gj + 19$

14. Solve for n : $M + Pn = 24n + z$

15. Solve for g : $gy + j = c - 26g$

16. Solve for S : $22S - 18 = ES + V$

17. Solve for X : $N + Xn = P + UX$

18. Solve for Y : $6Y + 13 = CY + H$

19. Solve for Z : $-12Z + 10 = G + Zy$

20. Solve for K : $BK + 5 = 3K + 9$

2 Quadratic equations

Solve the following quadratic equations.

1. $-12x^2 = 6x^2 + 9$

2. $17x^2 + x = -3x - 12$

3. $-17x^2 - 13 = -18$

4. $-6x^2 + 21x = 0$

5. $11x^2 - 17 = 0$

6. $17x^2 + 20 = 4x^2 - 18x$

7. $-22x^2 - 8x + 13 = -16x$

8. $13x^2 - 23x + 2 = 16x - 22$

9. $2x^2 + 14x = 0$

10. $17x^2 - 5x - 10 = -6$

11. $-2x^2 - 13x + 5 = 0$

12. $-19x^2 + x = 11x$

13. $-6x^2 - 11x + 12 = -9x^2 - 24x + 20$

14. $-10x^2 + 25x = 25x^2 - 7x$

15. $4x^2 - 11 = 23x + 11$

16. $-2x^2 = -2x^2 - 4x$

17. $21x^2 - 6 = 0$

18. $-23x^2 = -23x - 11$

19. $-2x^2 + 19x + 6 = -19x^2 - 14$

20. $6x^2 - 20x + 5 = 0$