Algebra 101 exam 1

1 Linear equations

Solve the following equations for the specified variable.

1. Solve for e : $J + en = Ne - 11$

2. Solve for V : $-3V + d = 6V + z$

3. Solve for f : $Rf + R = 17f - 9$

4. Solve for S : $-14S + 20 = -17S + k$

5. Solve for h : $5h + n = 25h + r$

6. Solve for C : $CM + v = -24C + K$

7. Solve for r : $10r + 17 = -11r + 2$

8. Solve for U : $3U - 24 = -12U + 4$

9. Solve for W : $WY - 18 = 10W - 24$

10. Solve for v : $J + 6v = -2v + 14$

11. Solve for J : $JQ - 20 = Jp + k$

12. Solve for p : $Rp + 13 = pz - 17$

13. Solve for B : $Bc + x = 2B + 12$

14. Solve for a : $R + 10a = Na + h$

15. Solve for g : $K - 8g = d + gt$

16. Solve for A : $-2A + 8 = -7A + 19$

17. Solve for d : $8d + 16 = L + 22d$

18. Solve for w : $-10w + 7 = 10w + 6$

19. Solve for m : $-12m + 19 = Vm - 25$

20. Solve for Z : $V - 20Z = Zd + g$

2 Quadratic equations

Solve the following quadratic equations.

1. $17x^2 = -14x^2 + 12$

2. $20x^2 - 10x = 5x^2 + 5x$

3. $3x^2 + 22x = 19x - 2$

4. $2x^2 - 26x - 19 = 0$

5. $-17x^2 + 13x = 0$

6. $18x^2 + 3x = -18x^2 + 24x - 12$

7. $2x^2 + 15 = 8x$

8. $-24x^2 = -17x + 16$

9. $6x^2 - 7x + 15 = -12x^2$

10. $-16x^2 = 0$

11. $-12x^2 + 15x + 14 = -21x$

12. $-15x^2 - 9x = 0$

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13. $-8x^2 - 25x - 6 = -23x$

14. $7x^2 - 24x - 11 = -7x$

15. $-26x^2 + 7x = 20$

16. $-2x^2 + 4x - 20 = 4x^2 + 3$

17. $-26x^2 - 24x = -7$

18. $7x^2 + 20x + 10 = -23x^2$

19. $14x^2 + 20x + 10 = -18$

20. $24x^2 + 23x = 9$