

Solving Equations by Factoring (ALG.FAC.08)

Solve each equation by factoring.

1. $a^3 - 4a^2 - 21a = 0$

2. $2b^3 + 5b^2 - 8b - 20 = 0$

3. $2c^5 - 32c = 0$

4. $6d^3 = 2d(20 - 7d)$

5. $4f^4 - 37f^2 = -9$

6. $x^5 + x^3(5x + 6) - 4x^3 = 4x(5x + 6)$

7. $9k^4 + 4 = 13k^2$

8. $6m^3 + 24m^2 = 126m$

9. $2n^8 - 2n^6 + 2n^5 - 2n^3 = 0$

10. $12p^3 + 6p^2 = 90p$

11. $91r^4 + 35r^3 = -42r^5$

12. $t^2 + 36 = 12t$

13. $-20u^6 + 12u^5 + 20u^4 - 12u^3 = 0$

14. $-5x^2 + 8 = 18x$

15. $49y^4 = 25y^2$

16. $15m^5 - 6m^4 - 135m^3 + 54m^2 = 0$

17. $-8q^3 - 38q^2 = -10q$

18. $3x^3 + 9x^2 = 27x + 81$

19. $15n^2(2n + 1) - 29n(2n + 1) - 14(2n + 1) = 0$

20. $3x^9 - 3x^7 - 21x^6 + 21x^4 - 24x^3 + 24x = 0$