

Factoring Quadratic Expressions: The “AC” Method (ALG.FAC.04)

Factor each expression completely.

1. $5a^2 + 16a + 3$

2. $7b^2 + 17b + 6$

3. $4c^2 + 15c - 4$

4. $2d^2 - 5d - 12$

5. $2f^2 - 3f - 5$

6. $6g^2 - 13g - 5$

7. $-7h^2 + 27h - 18$

8. $9j^2 + 49j - 30$

9. $10j^2 - 7jk + k^2$

10. $9m^2 + 12mn + 4n^2$

11. $125n^2 - 50n + 5$

12. $98p^6 - 84p^5 + 18p^4$

13. $-24p^2 - 4pq + 48q^2$

14. $18r^4 - 51r^3 - 42r^2$

15. $35u^2 - 2u - 1$

16. $-5x^6 + 5x^5 + 10x^4$

17. $-45y^2 + 74y - 24$

18. $30x^2 - 21xy - 36y^2$

19. $-15x^3 - 85x^2y + 450xy^2$

20. $36u^3v + 308u^2v^2 - 144uv^3$

21. $5a(6a^2 + 19a + 10) + 3(6a^2 + 19a + 10)$

22. $2n(4n^2 - 4n + 1) + 1(4n^2 - 4n + 1)$

23. $40m^2(3m - n) + 2mn(3m - n) - 2n^2(3m - n)$

24. $2x(12x^2 - 5xy - 3y^2) - 3y(12x^2 - 5xy - 3y^2)$