

Factor.

1. $ac + bc - ad - bd$ $(c-d)(a+b)$

2. $rt + st + ru + su$

3. $2a^2 + 3ab - 2ac - 3bc$

4. $6x^2 + 2xy - 3xz - yz$

5. $6m^2 + 4m - 9mn - 6n$

6. $10x^2 + 6x - 25xy - 15y$

7. $x^2 + 2xy + y^2 - 4z^2$

8. $a^2 + 2ab + b^2 - 16c^2$

9. $r^2 + 2rs + s^2 - 64t^2$

10. $c^2 + 2cd + d^2 - 81$

11. $x^2 - y^2 - 2yz - z^2$

12. $16a^2 - b^2 - 2bc - c^2$

13. $a^2 + 2ab + b^2 + 2a + 2b + 1$

14. $c^2 + 2cd + d^2 + 6c + 6d + 9$

15. $16 + 8r + 8s + r^2 + 2rs + s^2$

16. $25 + 10m + 10n + m^2 + 2mn + n^2$

17. $6x^3 + 2x^2 + 21x^2y + 7xy + 9xy^2 + 3y^2$

18. $6x^3 + 3x^2 + 14x^2y + 7xy + 8xy^2 + 4y^2$

19. $10x^2 + 2x^2y + 35x^2 + 7xy + 30x + 6y$

20. $12x^3 + 9x^2 - 52x^2y - 39xy - 40xy^2 - 30y^2$

21. $10m^3 - 25m^2 - 26m^2n + 65mn - 12mn^2 + 30n^2$

22. $6c^3 + 21c^2 - 18c^2d - 63cd - 24cd^2 - 84d^2$

23. $14r^3 + 7r^2t - 32r^2 - 16rt - 30r - 15t$

24. $35x^2 + 70xy + 35y^2 - 3x - 3y - 2$

25. $6x^2 + 12xy + 6y^2 - 7x - 7y - 5$

Factor.

1. $x^4 - 625y^4$ $(x-5y)(x+5y)(x^2+25y^2)$

2. $x^2 + 8xy + 16y^2 - 25$

3. $7r^3 - 14r^2 - 105r$

4. $7a^4 + 70a^3 + 147a^2$

5. $8ax^2 + 12ax + 4axy + 6ay$

6. $6p^2m - 6mpq + 21mp - 21mq$

7. $60a^2t^3 - 4at^3 - 8t^3$

8. $15x^3 + 10x^2 - 15x^2y - 10xy$

9. $27x^3 + 90x^2 + 75x$

10. $24a^3 + 90a^2 + 21a$

11. $10x^2z + 5xyz + 30xz + 15yz$

12. $13r^3 - 325r$

13. $120m^2n - 32mn - 24n$

14. $256 - 81r^4$

15. $x^2 - 10xy + 25y^2 - 16$

16. $c^2 + vc + 7c + 7v$

17. $18a^2r + 87ar + 84r$

18. $2401 - x^4$

19. $16x^4 - 625y^4$

20. $135z^2 - 63z^3 - 18z^4$

21. $a^2 - 2at + ab - 2bt$

22. $4a^6 + 36a^5 + 56a^4$

23. $175a^2x - 112x$

24. $18ab^2 + 3b^2 + 18abc + 3bc$

25. $48c^3 + 156c^2 + 90c$

26. $192r^3 - 288r^2 + 108r$

27. $6xyr + 9yr - 6xrz - 9rz$

28. $36a^5 - 15a^4 - 6a^3$

29. $5x^2m^2 - 15xm^2 - 50m^2$

30. $189r^4 - 261r^3 - 90r^2$

31. $16a^2 + 8ab + b^2 + 60a + 15b + 6$

32. $4a^2 - 4ab + b^2 + 16a - 8b + 15$

33. $9a^2 + 6ab + b^2 + 6a + 2b - 3$

34. $25a^2 + 10ab + b^2 + 25a + 5b + 4$