

Math 1513 - College Algebra

Discussion Board Week 2 - Due 2016.01.24

Factor the following polynomials as far as possible, by any method. Be sure to show all of your steps. Note: All variables are represented as SINGLE letters in the following problems.

1. $3qp^2 + 3p - q^2p - q$

2. $-3a^3 - 3a - 4ba^2 - 4b$

3. $-6yzx - 6y^2z + 4x^2 + 4xy$

4. $-6y^3z - 6yz^3 + 4y^2 + 4z^2$

5. $56de - 21df - 40e^2 + 15ef$

6. $56e^2 - 21 - 40e^3f + 15ef$

7. $2x^2y^2 + 2xy^2 + 3x^3y + 3x^2y$

8. $144t^3 + 12t^2 - 12t$

9. $3r^2s + 12r + 2rs^2 + 8s$

10. $6a^3b + 3ab^4 + 8a^2 + 4b^3$

11. $m^4 - m^2 - 12$

12. $12tr - 8ts - 18yr + 12ys$

13. $21x^2y^2 + 2xyab - 8a^2b^2$

14. $21a^2xy + 14ax^2b - 12by^2a - 8b^2yx$

15. $t^2s^3 + 2ts^4 + 2t^3s + 4t^2s^2$

16. $-18tv^2 + 36t^2v - 48t - 10v^3 + 40v$

17. $a^2 + 2ac - b^2 + c^2$

18. $2x^2 + xy - y^2 + 3zx + 3yz$

19. $rs^2 + tr - 2s^3 - 2ts + 3s^2t + 3t^2$

20. $4gj + 5gk + 6gl + 8hj + 10hk + 12hl + 12ij + 15ik + 18il$

21. $3a^2 + 5ab + ad - 2b^2 + 2bd - 3ca + cb - cd$

22. $a^3 - 2ad + a - b^2a^2 + 2b^2d - b^2$

23. $6s - 18st + 15sr - 20t + 24t^2 - 20tr + 4 + 10r$

24. $16r - 38tr + 15r^2 - 20t + 24t^2 + 4$

25. $30s^3t^3 - 82s^2t^2 + 28st$

26. $30s^3t^3 + 70s^2t + 12s^2t^2 + 28s$