

# Math 1513 - College Algebra

## Discussion Board Week 2 - Due 2016.08.28

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