

Assignment 4 – Factor by Grouping

1) Factor by grouping

a) $x^3 + 2x^2 + 6x + 12 =$

h) $3m^3 + 9m^2 + 5m + 15 =$

b) $x^3 + 3x^2 + 15x + 45 =$

i) $6b^3 - 9b^2 - 4b + 6 =$

c) $m^3 - 5m^2 + 2m - 10 =$

j) $2a^3 - 6a^2 - a + 3 =$

d) $a^3 - 9a^2 - 5a + 45 =$

k) $5x^3 + 2x^2 - 25x - 10 =$

e) $x^3 - 15x^2 - 4x + 60 =$

l) $16 + 4p + 4p^2 + p^3 =$

f) $2x^3 + 2x^2 + 3x + 3 =$

m) $15 - 3y - 5y^2 + y^3 =$

g) $3x^3 + x^2 + 6x + 2 =$

n) $a^2 + ax + ay + xy =$

2) Factor by grouping. There is a good chance you may need to rearrange the terms!

a) $ab + x^2 - ax - bx =$

b) $4b^2 + 3a - 12b - ab =$

c) $4x^2 + 15y^2 - 12xy^2 - 5x =$