

## Factoring By Grouping

Factor each completely.

1)  $12a^3 - 9a^2 + 4a - 3$

2)  $2p^3 + 5p^2 + 6p + 15$

3)  $3n^3 - 4n^2 + 9n - 12$

4)  $12n^3 + 4n^2 + 3n + 1$

5)  $(m^3 - m^2)(2m - 2)$

6)  $(5n^3 - 10n^2)(3n - 6)$

$$m^2(\underline{m-1}) + 2(\underline{m-1})$$

$$5n^2(\underline{n-2}) + 3(\underline{n-2})$$

$$(m-1)(m^2+2)$$

$$(n-2)(5n^2+3)$$

7)  $24p^3 + 15p^2 - 56p - 35$

8)  $24r^3 - 64r^2 - 21r + 56$