

## 5-2 Factoring Polynomials by Grouping

Name \_\_\_\_\_

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Hour \_\_\_\_\_

Factor each COMPLETELY.

**Tips:**

1- Try grouping in the given order before rearranging.

2- Try something. Guessing and CHECKING is a common math strategy.

3- All factoring by grouping applies the distributive property:  $a(b + c) = ab + ac$ .

4- Always be sure you are not changing the value of the expression; just write it in a different form. (WATCH YOUR SIGNS!)

1)  $60n^3 + 15n^2 - 40n - 10$

2)  $16p^3 + 8p^2 - 2p - 1$

3)  $2x^3 - 3x^2 - 14x + 21$

4)  $12r^3 + 15r^2 - 20r - 25$

5)  $7v^3 + 8v^2 + 49v + 56$

6)  $30b^3 - 5b^2 - 12b + 2$