

## Factor By Grouping

Date \_\_\_\_\_

Period \_\_\_\_\_

Factor each completely.

1)  $4a^3 - 8a^2 + 3a - 6$

2)  $2b^3 - 5b^2 + 10b - 25$

3)  $6x^3 + 8x^2 + 15x + 20$

4)  $20n^3 + 8n^2 + 15n + 6$

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

6)  $n^3 + 2n^2 + 5n + 10$

7)  $100v^3 - 40v^2 + 20v - 8$

8)  $4k^3 + 6k^2 + 16k + 24$

9)  $24r^4 + 6r^3 + 16r^2 + 4r$

10)  $4v^4 - 4v^3 + 4v^2 - 4v$

11)  $x^3 - 6x^2 - 9x + 54$

12)  $x^4 - 3x^3 - x^2 + 3x$

Quadratic Form Factoring ( $a > 1$  &  $x^4$ )

Date \_\_\_\_\_ Period \_\_\_\_\_

Factor each completely.

1)  $n^2 + 10n + 16$

2)  $x^2 - 8x - 20$

3)  $5x^2 + 46x + 9$

4)  $5k^2 + 49k + 36$

5)  $2m^2 + 3m - 27$

6)  $3n^2 - 26n - 40$

7)  $x^4 - 5x^2$

8)  $2x^5 - 8x^3 - 10x$

9)  $3x^5 + 24x^3 + 45x$

10)  $u^6 - 2u^4 - 3u^2$