

Name : \_\_\_\_\_

Score : \_\_\_\_\_ Date : \_\_\_\_\_

# Factoring by Grouping 4 Terms

Factor each completely.

(1)  $3y^3 + 12y^2 + y + 4$

(2)  $3x + 7y - 21 - xy$

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(3)  $56xw + 49xk^2 - 24yw - 21yk^2$

(4)  $21uv + 8b + 3u + 56bv$

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(5)  $24p^3 + 15p^2 - 56p - 35$

(6)  $192xy - 32x - 24ny + 4n$

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(7)  $18f^3 - 33f^2 + 30f - 55$

(8)  $25k^3 + 15k^2 - 5k - 3$

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# Factoring by Grouping 4 Terms

## Answers

(1)  $3y^3 + 12y^2 + y + 4$

(2)  $3x + 7y - 21 - xy$

$(3y^2 + 1)(y + 4)$

$(3 - y)(x - 7)$

(3)  $56xw + 49xk^2 - 24yw - 21yk^2$

(4)  $21uv + 8b + 3u + 56bv$

$(7x - 3y)(8w + 7k^2)$

$(3u + 8b)(7v + 1)$

(5)  $24p^3 + 15p^2 - 56p - 35$

(6)  $192xy - 32x - 24ny + 4n$

$(3p^2 - 7)(8p + 5)$

$4(8x - n)(6y - 1)$

(7)  $18f^3 - 33f^2 + 30f - 55$

(8)  $25k^3 + 15k^2 - 5k - 3$

$(3f^2 + 5)(6f - 11)$

$(5k^2 - 1)(5k + 3)$