

Factor by Grouping

Factor each completely.

1) $5mn - 2m^2 - 40n + 16m$

2) $4xy + x - 4y - 1$

3) $20az + 35ac - 28yz - 49yc$

4) $15xy + 9x + 10y + 6$

5) $20ab + 12a^2 - 25b - 15a$

6) $10n^3 + 12n^2 - 35n - 42$

7) $n^3 + 8n^2 + 5n + 40$

8) $2r^3 - r^2 + 10r - 5$

9) $20b^3 + 28b^2 + 15b + 21$

10) $7x^3 + 42x^2 - 8x - 48$

11) $8x^3 - 56x^2 - 7x + 49$

12) $5r^3 - 7r^2 + 25r - 35$