

Factoring Trinomials when $a \neq 1$

① Check for GCF

② Magic #

③ Replace B

④ Group

① $2n^2 - 7n + 3$ M#: 6

$2n^2 - 1n - 6n + 3$ -1 -6

$n(2n-1) - 3(2n-1)$

$(n-3)(2n-1)$

② $3y^2 + 14y - 5$ M#: -15

$3y^2 + 15y - 1y - 5$ +15 -1

$3y(y+5) - 1(y+5)$

$(3y-1)(y+5)$

③ $2t^2 + 13t - 7$ M#: -14

$2t^2 + 14t - 1t - 7$ 14 -1

$2t(t+7) - 1(t+7)$

$(2t-1)(t+7)$

④ $15n^2 - 27n - 6$

$3(5n^2 - 9n - 2)$

$5n^2 - 10n + 1n - 2$

$5n(n-2) + 1(n-2)$

$3(5n+1)(n-2)$

⑤ $-3m^2 - m + 2$

$-1(3m^2 + m - 2)$

$3m^2 + 3m - 2m - 2$

$3m(m+1) - 2(m+1)$

$-1(3m-2)(m+1)$