

November 7, 2016

Factoring Trinomials

* Sign Patterns

* Note: $a = +1$

① $ax^2 + bx + c$; Both numbers have the "sign"
 $(x+7)(x+3)$
 $bx = 7x$
 • Both are positive

② $ax^2 - bx + c$; Both same sign
 $(x-4)(x-3)$
 $bx = -7x$
 • Both are negative

③ $ax^2 + bx - c$; Numbers have opposite "signs"
 $(x+4)(x-3)$
 $bx = x$
 • Larger number is positive

④ $ax^2 - bx - c$; opposite "signs"
 $(x-4)(x+3)$
 $bx = -x$
 • Larger number is negative

Nov 7-9:02 AM

$m^2 - m - 56$

$m^2 - 8m + 7m - 56$ $ac = 1 \cdot (-56) = -56$

$m(m-8) + 7(m-8)$ $b = -1$

$(m-8)(m+7)$

-	+
8	7

Nov 7-9:20 AM

$x^2 - 4x + 24$ $ac = +24$
 $b = -4$

Not Factorable R.P.

-	-	+24	-4
?	?		

Nov 7-9:44 AM