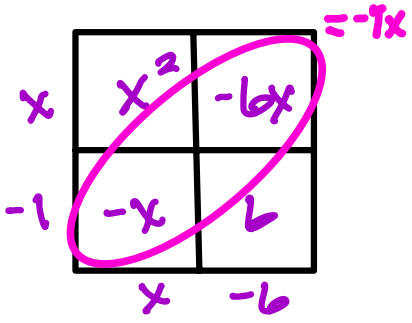
Factoring Trinomials of the Form $x^2 + bx + c$ (Even #'s)

$x^2 + 2x - 15 = (x + 5)(x - 3)$

2. $x^2 - 7x + 6 =$ $x^2 - 6x - x + 6$

$x(x-6) - 1(x-6)$

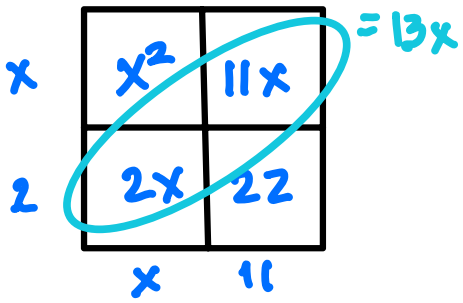
$(x-1)(x-6)$



4. $x^2 + 13x + 22 =$ $x^2 + 11x + 2x + 22$

$x(x+11) + 2(x+11)$

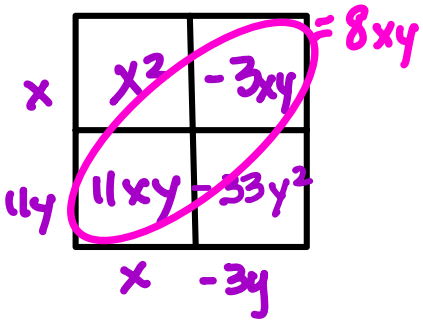
$(x+2)(x+11)$



6. $x^2 + 8xy - 33y^2 =$ $x^2 + 11xy - 3xy - 33y^2$

$x(x+11y) - 3y(x+11y)$

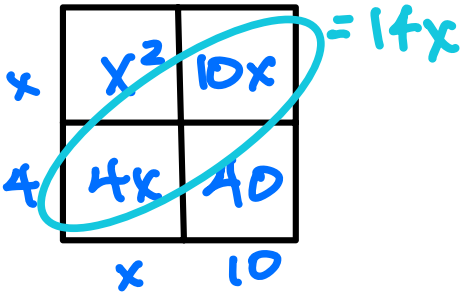
$(x-3y)(x+11y)$



8. $x^2 + 14x + 40 =$ $x^2 + 10x + 4x + 40$

$x(x+10) + 4(x+10)$

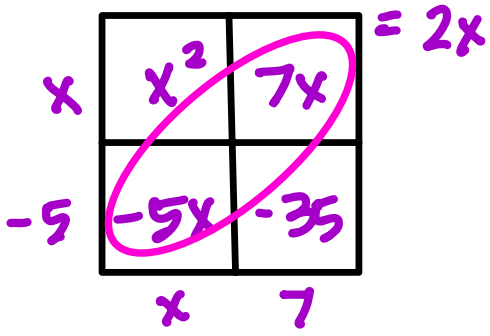
$(x+10)(x+4)$



10. $x^2 + 2x - 35 =$ $x^2+7x-5x-35$

$x(x+7)-5(x+7)$

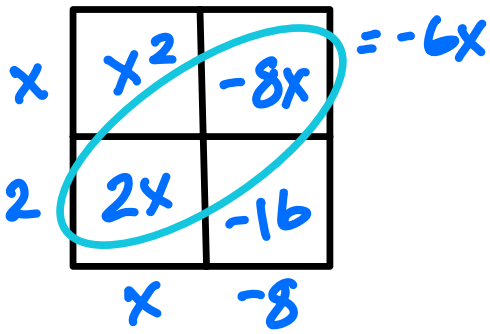
$(x+7)(x-5)$



12. $x^2 - 6x - 16 =$ $x^2-8x+2x-16$

$x(x-8)+2(x-8)$

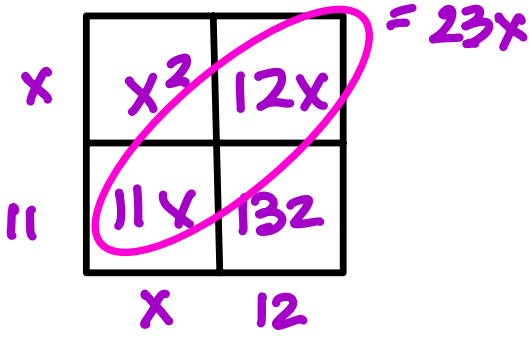
$(x-8)(x+2)$



14. $x^2 + 23x + 132 =$ $x^2+12x+11x+132$

$x(x+12)+11(x+12)$

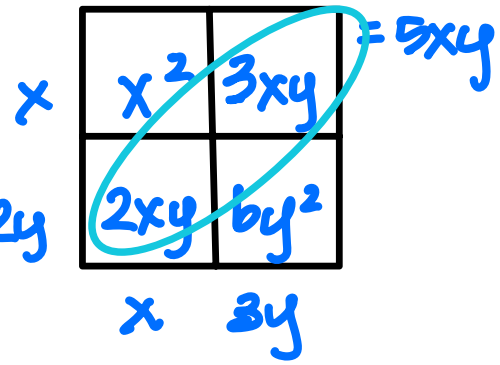
$(x+12)(x+11)$



16. $x^2 + 5xy + 6y^2 =$ $x^2+2xy+3xy+6y^2$

$x(x+2y)+3y(x+2y)$

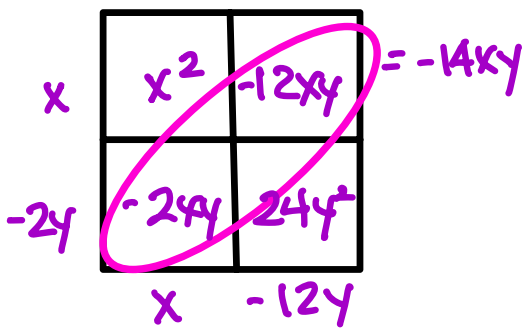
$(x+2y)(x+3y)$



18. $x^2 - 14xy + 24y^2 =$ $x^2-12xy-2xy+24y^2$

$x(x-12y)-2y(x-12y)$

$(x-12y)(x-2y)$



20. $x^2 - 16x + 39 =$ $x^2-13x-3x+39$

$x(x-13)-3(x-13)$

$(x-13)(x-3)$