

6.

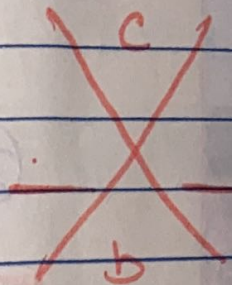
# Factoring Trinomials (a=1)

$ax^2 + bx + c$  ← Quadratic Trinomial

$x^2 + bx + c$        $a=1$   
 $(x + \underline{\quad})(x + \underline{\quad})$

Multiply to c + add to b

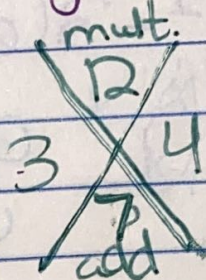
Always look for GCF 1st!



Factor completely:

1.  $x^2 + 7x + 12$

$(x+3)(x+4)$

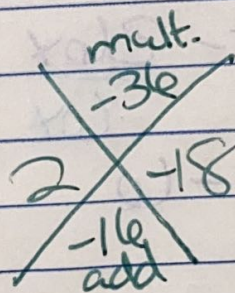


Factors of 12

1 · 12	-1 · -12
2 · 6	-2 · -6
3 · 4	-3 · -4

2.  $x^2 - 16x - 36$

$(x+2)(x-18)$

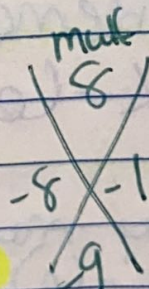


Factors of 12

-1 · 36	1 · -36
-2 · 18	2 · -18

GCF 1st! 3.  $\frac{3x^2}{3} - \frac{27x}{3} + \frac{24}{3}$

$3(x^2 - 9x + 8)$   
 $3(x-8)(x-1)$



4.  $x^2 - 81$

$1x^2 + 8x - 81$   
 $(x+9)(x-9)$

