### 1.5 Tricky Trinomials

"Tricky Trinomials" refers to polynomials with "a" $\neq 1$ the procedure for factoring is called "decomposition. You must find factors that multiply to give you "ac" and add to give you " $b$ ".

Example \#1: $12 x^{2}-5 x-2$
$1^{\text {st }} \rightarrow$ " $\mathrm{ac}^{\prime \prime}=$ $\qquad$
"b" = $\qquad$
$2^{\text {nd }} \rightarrow$ Find possible factors of "ac" = $\qquad$
$3^{\text {rd }} \rightarrow$ Find which of these factors add to give you " $b$ " $=$ $\qquad$
$4^{\text {th }} \rightarrow$ These are your middle terms: $\qquad$
$5^{\text {th }} \rightarrow$ Factor by grouping

Example \#2: $4 x^{2}+17 x+4$

Example \#3: $21 x^{2}-29 x+10$

Example \#4: $4 x^{2}+28 x+49$

Example \#5: $6 x^{2}-12 x-18$

Homework: Worksheet \#1.5

