

Factoring with OUT an a-value

STEPS FOR FACTORING A TRINOMIAL WITHOUT AN A-VALUE

$$x^2 + bx + c$$

1. Always look for a GCF (Greatest Common Factor), if you find one, divide each term by the GCF and re-write using the distributive property.

2. Determine what two factors multiply to give you c and add or subtract to give you b .

$$x^2 + \underline{\underline{13x}} \oplus 40 \xrightarrow{\text{factors of } 40}$$

3. Plug the factors you find into the parenthesis (be careful with the signs)

$$(x \quad)(x \quad)$$

Rules to Remember

- ❖ If the last sign is _____ both signs are the **same**
 - The signs are the same as the _____
- ❖ If the last sign is _____ both signs are **different**
 - The middle term takes the sign of the _____ number