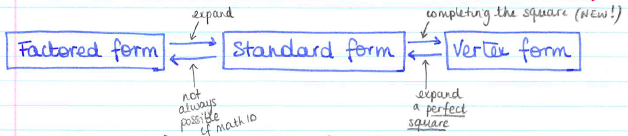
**Changing the form of a quadratic function**



**I – Changing into Standard Form : EXPANDING**

Example 1 :

Example 2 :

Your Turn : 🡪

🡪

Example 3 :

Example 4 :

Example 5 :

**II – Changing into Factored Form: FACTORING**

Always start by looking for common factors.

Think about differences of squares, perfect squares, otherwise, factor the long way…

Example 1 :

Example 2 : a) b)

Example 3 :

Your turn :

Example 4 :

Example 5 :

Example 6 :

Your turn :

**III – Changing into Vertex Form : COMPLETING THE SQUARE**

You have to regroup all the terms in and in a “forced” perfect square and compensate…

Example 1 :

Example 2 :

Your turn :

It becomes complicated very fast, especially when fractions start appearning…   
We are going to actually use a shortcut:

* Coefficient is the same one in every form
* If we know how to find the coordinates of the vertex, we just need to place and in the formula…

Examples :

**Hwk : p 192 # 1, 2ac, 3ac, 8, 10, 14, 17 – 19, 22, 29, 31 + handout**