1.
   * types need to be able to convert implicitly between each other
   * They need to be passed in by reference to reduce cost
   * All the params have to be of the same CordinateType
   * They all are consts

2.
   * You must create the new template for the copy cons
   * you must pass it by reference (infinite recursion possiblity)

3.
   * new template different than the main template is needed
   * similiar to copy cons

4.
   * They all need to be of the same type with the template name
   * they are all private
   * to access them you need to implement a getter to use them in other
     templates

5.
   * There needs to be either an implicit or a legal explicit call to the
     parameters in order to return the apprporiate results