

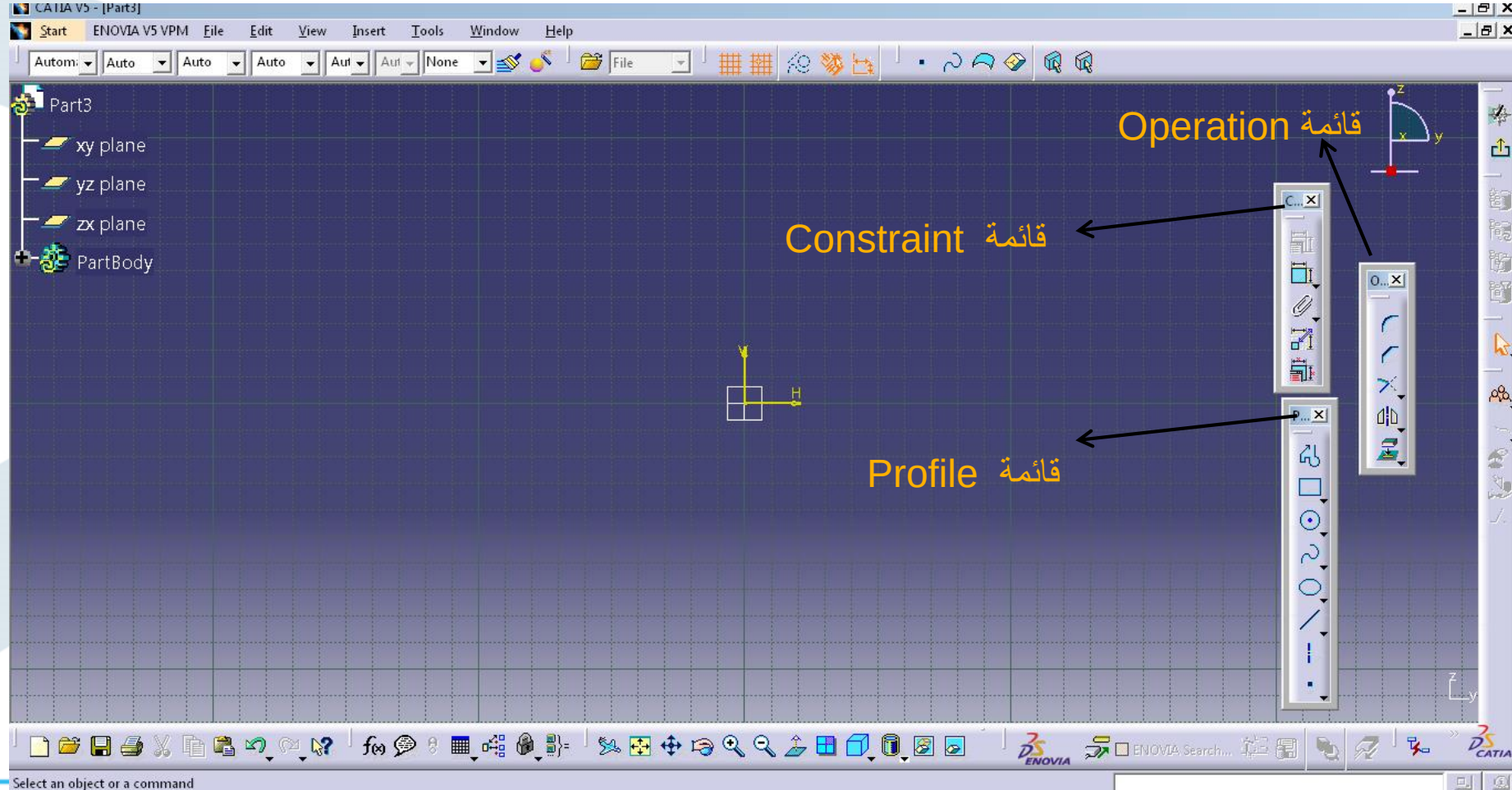
المحاضرة الثالثة

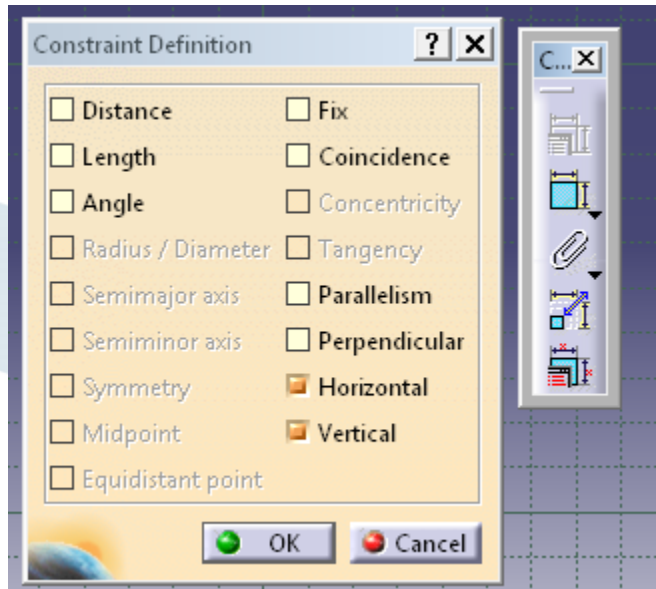
التصميم بمساعدة الحاسب

الدكتور المهندس
تمام سلّوم



في البيئة ثنائية البعد سوف نهتم بثلاث قوائم رئيسية



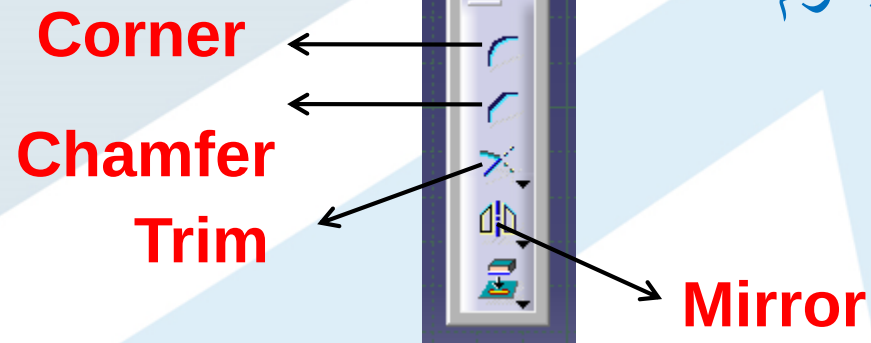


قائمة Constraint

هدف الأوامر الموجودة في هذه القائمة
هو وضع القيود من أبعاد و زوايا و قيود
توازي و تعامد و تماس على الشكل الهندسي

قائمة Operation

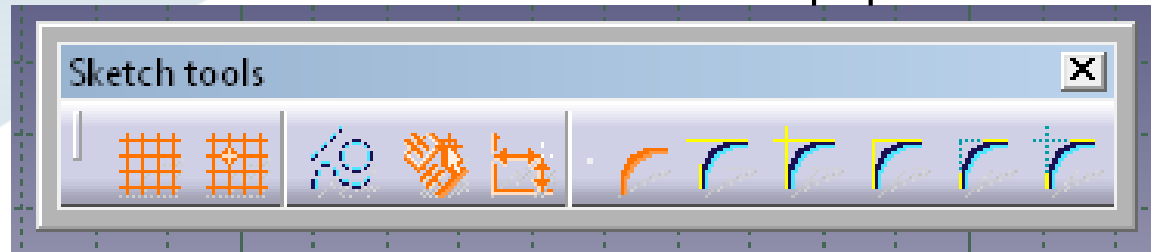
هدف الأوامر الموجودة في هذه القائمة
هو إجراء تعديلات على الشكل الهندسي المرسوم



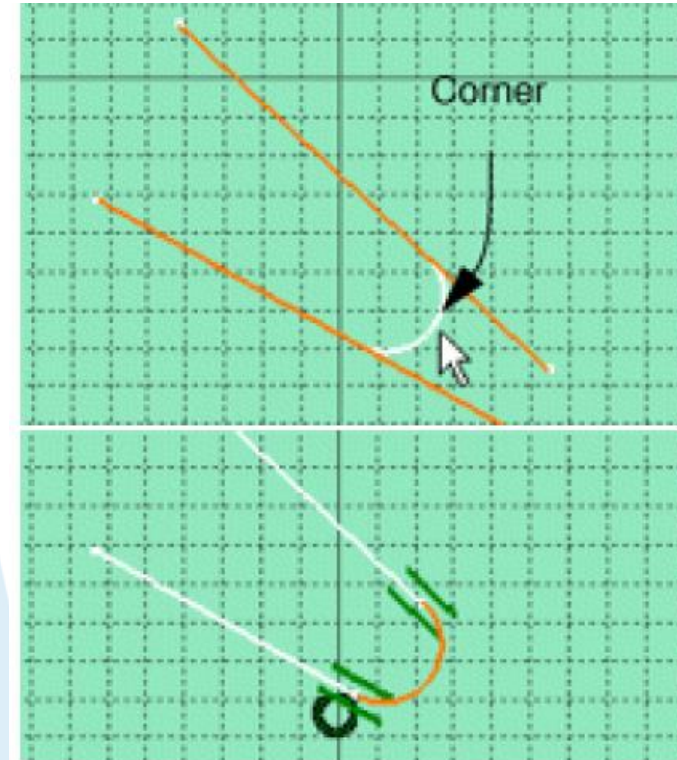
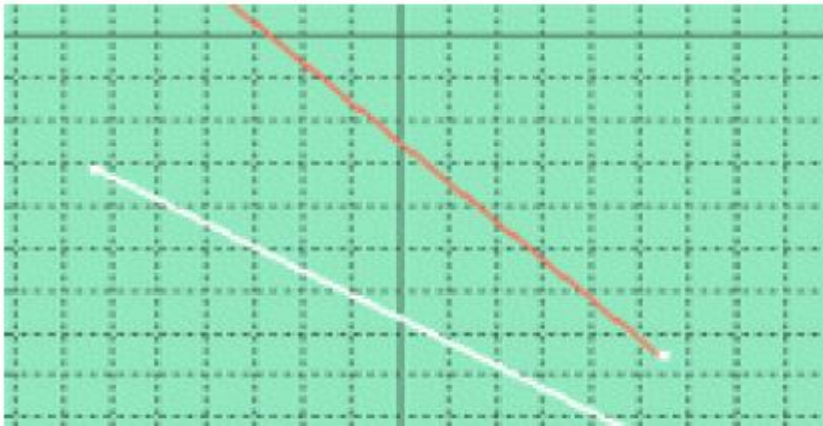
Creating Corners

طرق مختلفة لرسم الزاوية

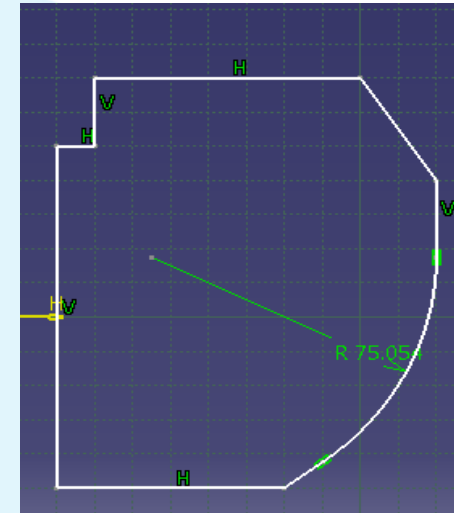
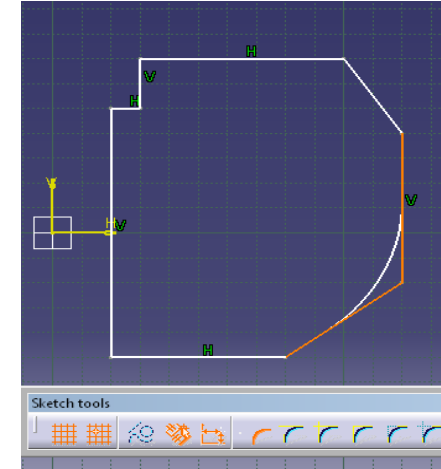
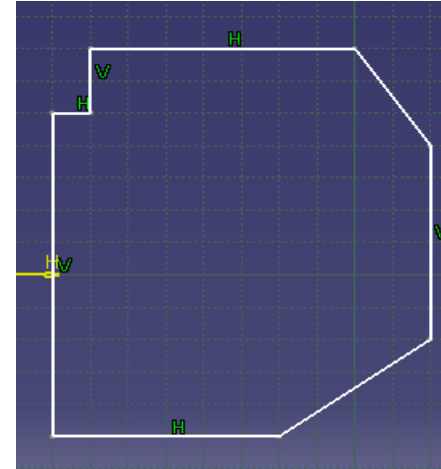
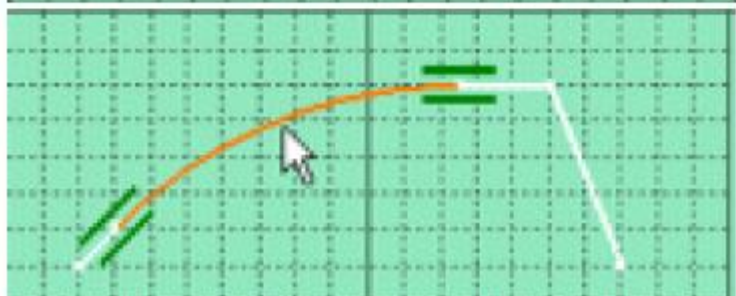
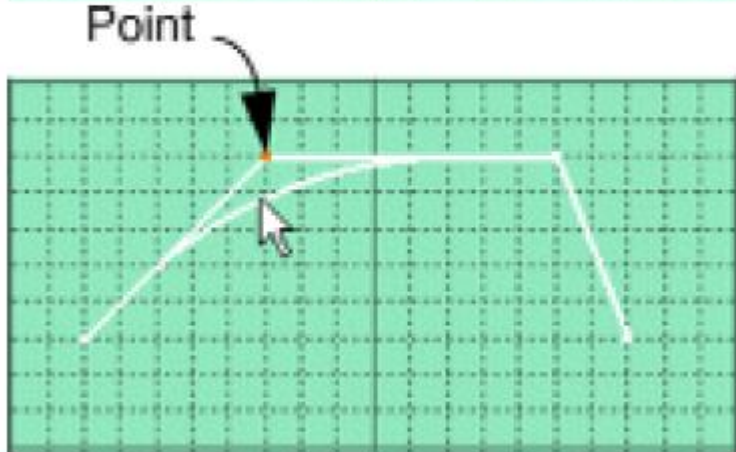
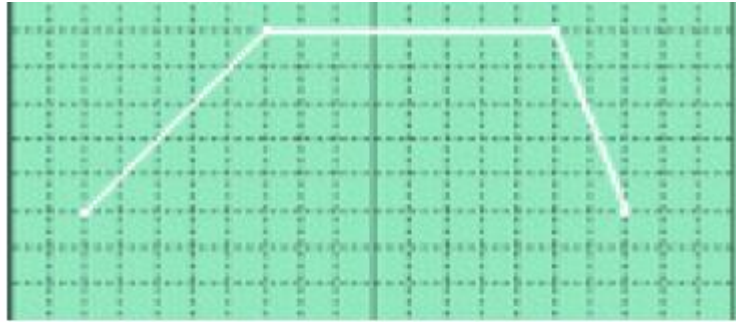
Corner



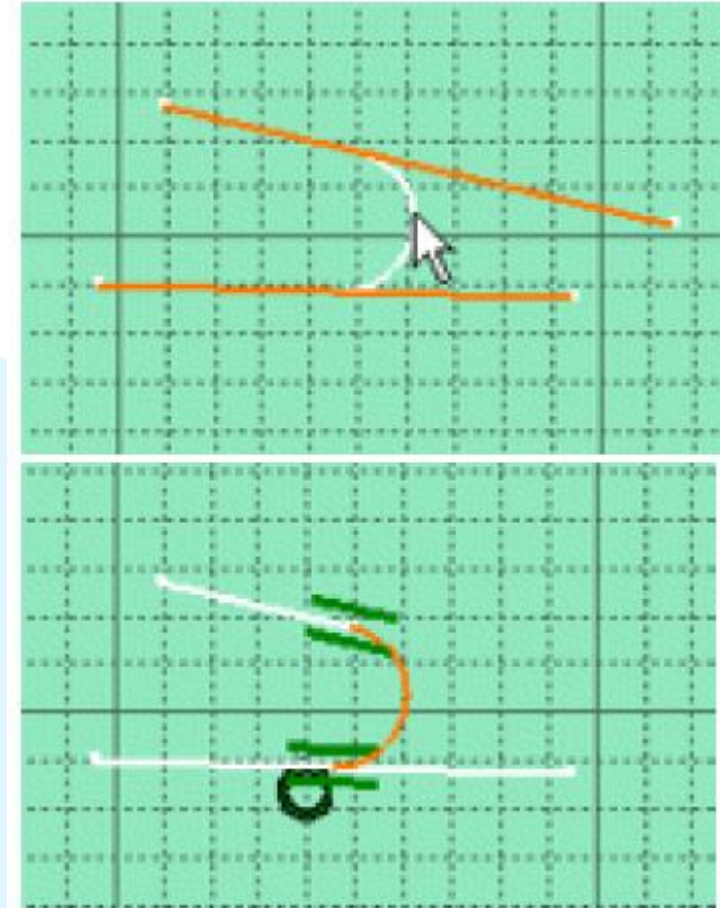
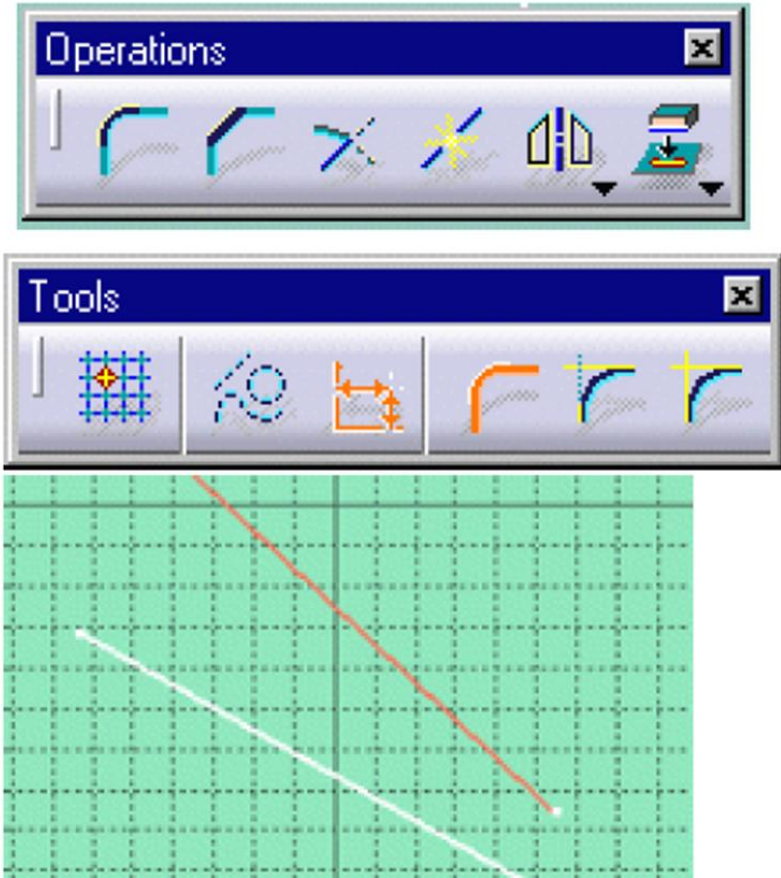
Creating Corners With Both Elements Trimmed



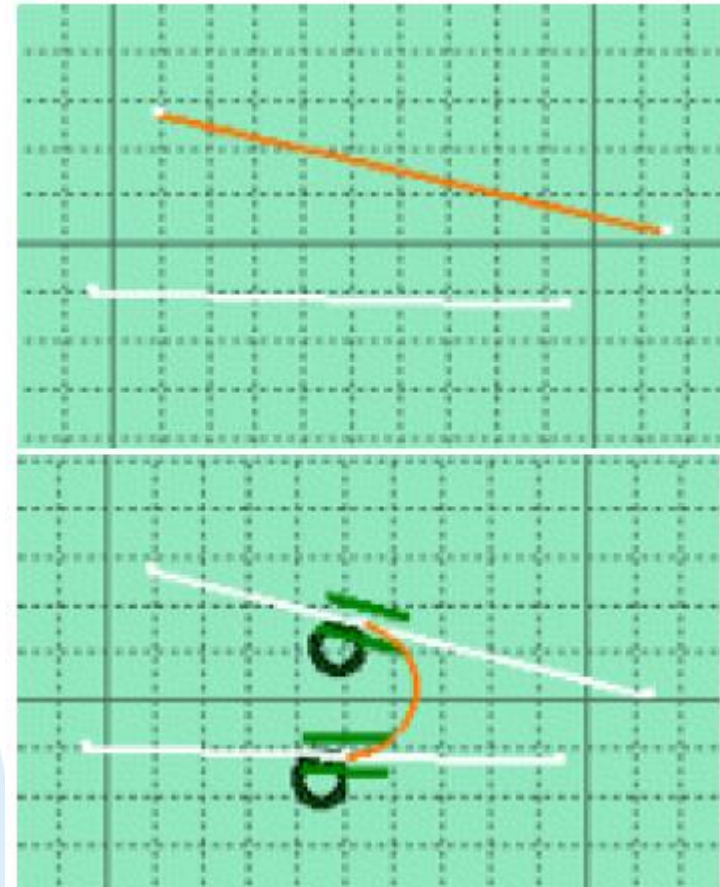
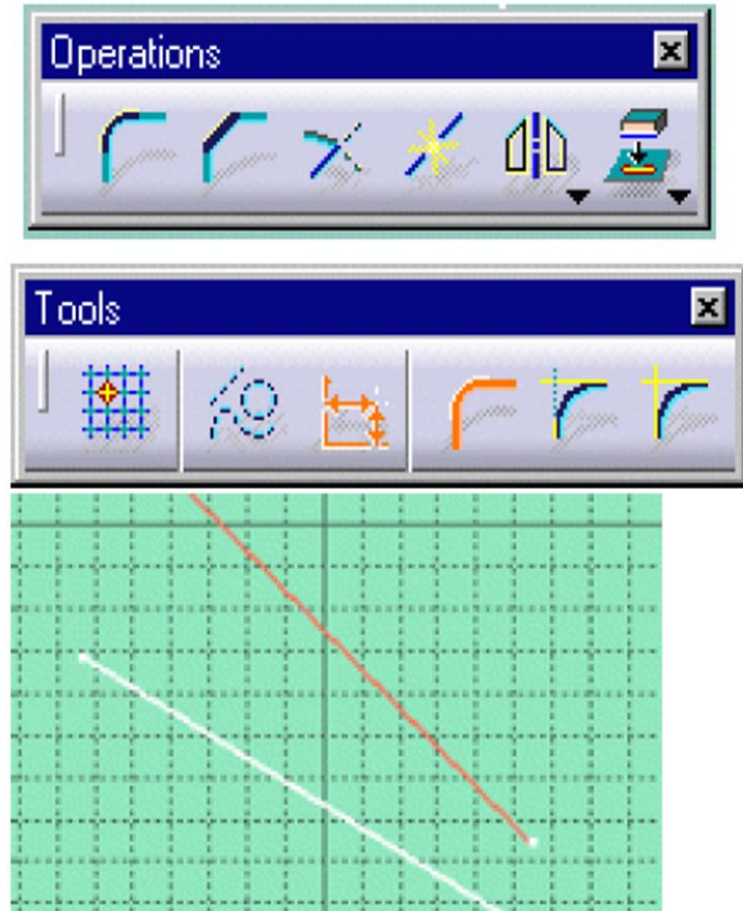
مثال اخر عن استخدام تعليمة Corner



Corners with One Element Trimmed



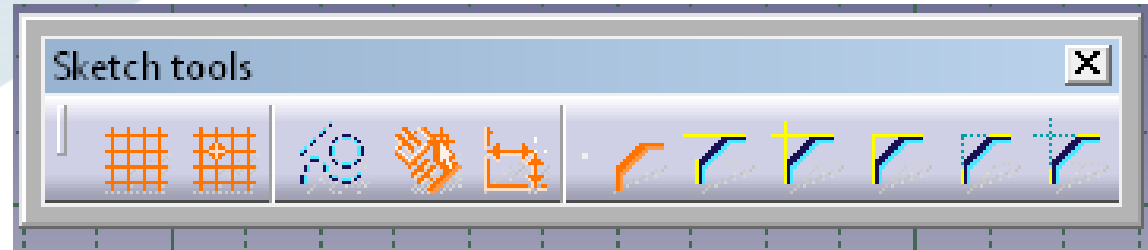
Creating Corners with No Elements Trimmed



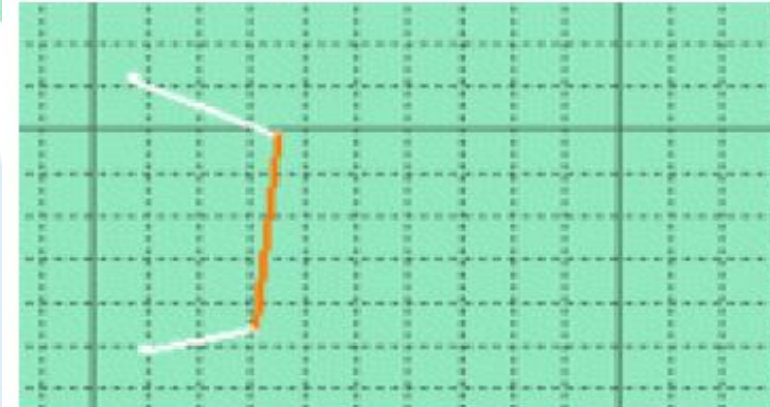
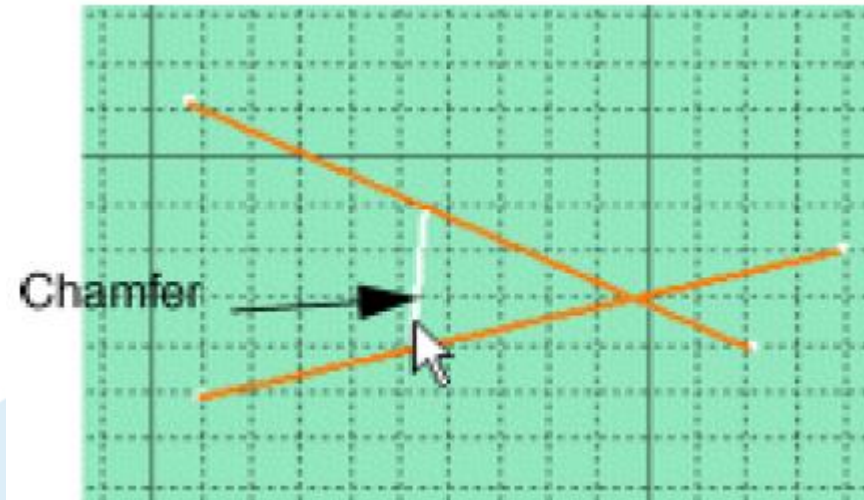
Creating Chamfer

طرق مختلفة لرسم الشطفة

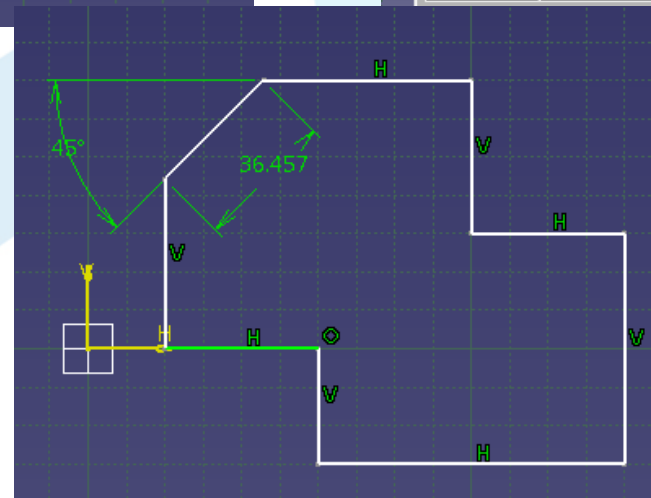
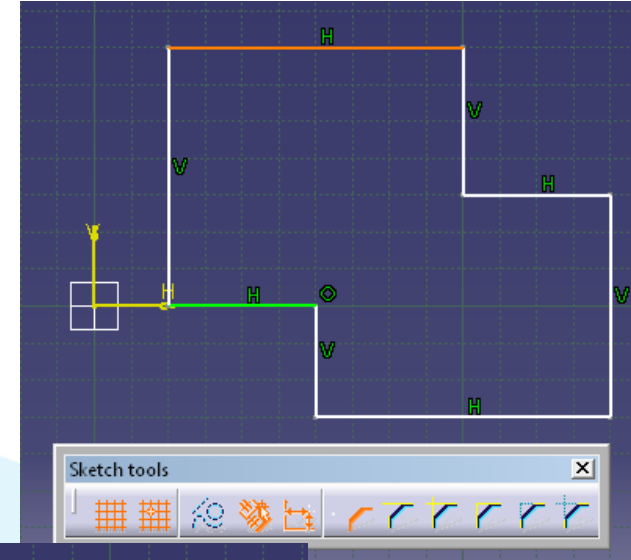
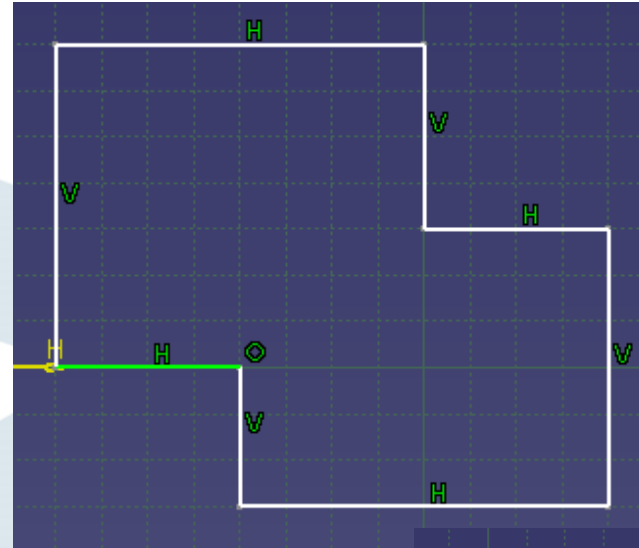
Chamfer



Creating Chamfers With Both Elements Trimmed

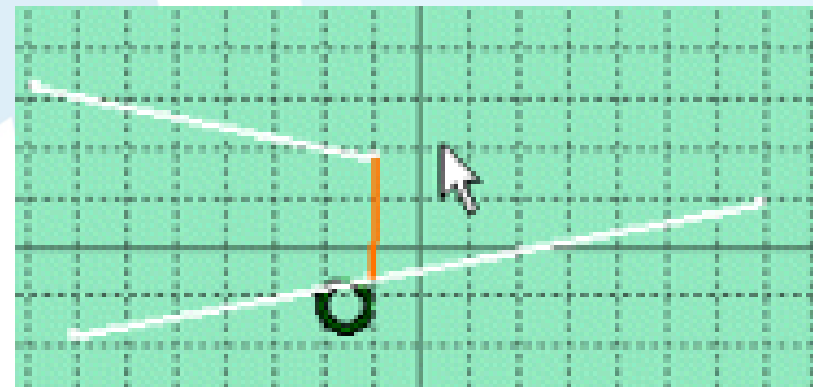
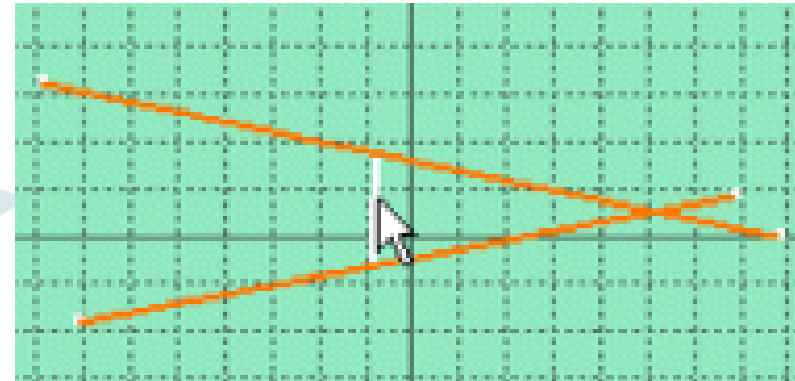


مثال اخر عن استخدام تعليمة Corner

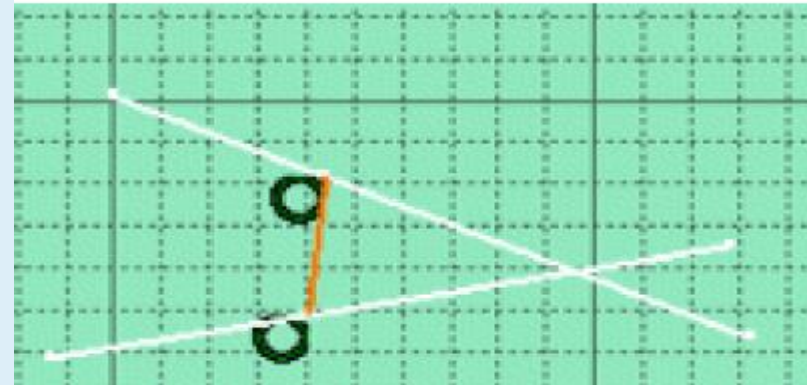




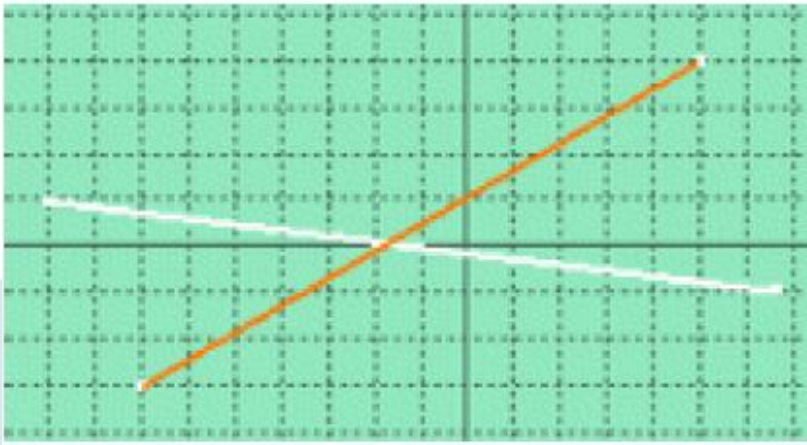
Chamfers with One Element Trimmed



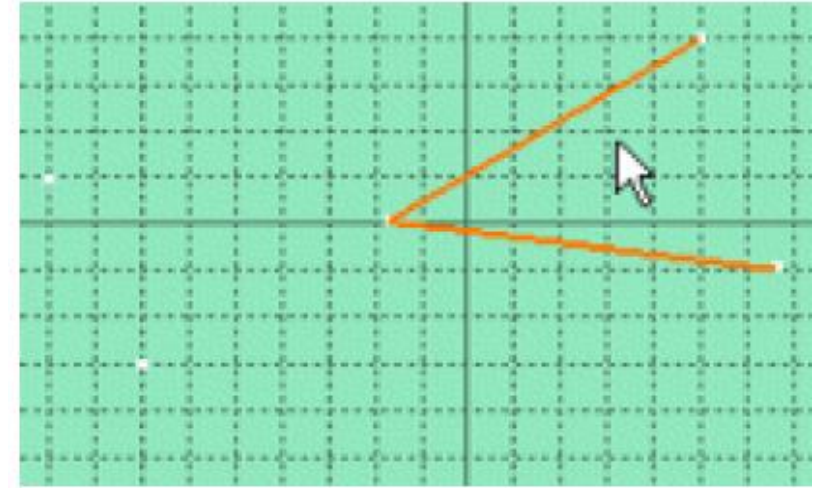
Chamfers with No Elements Trimmed



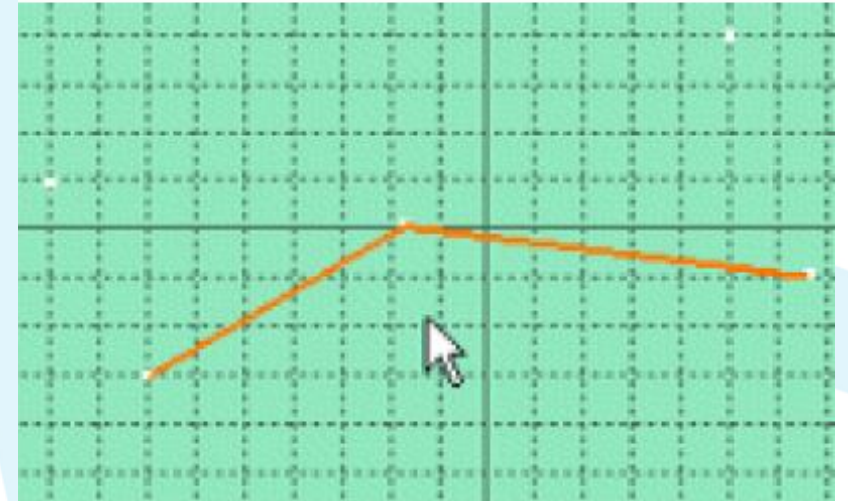
Trimming Elements



First example



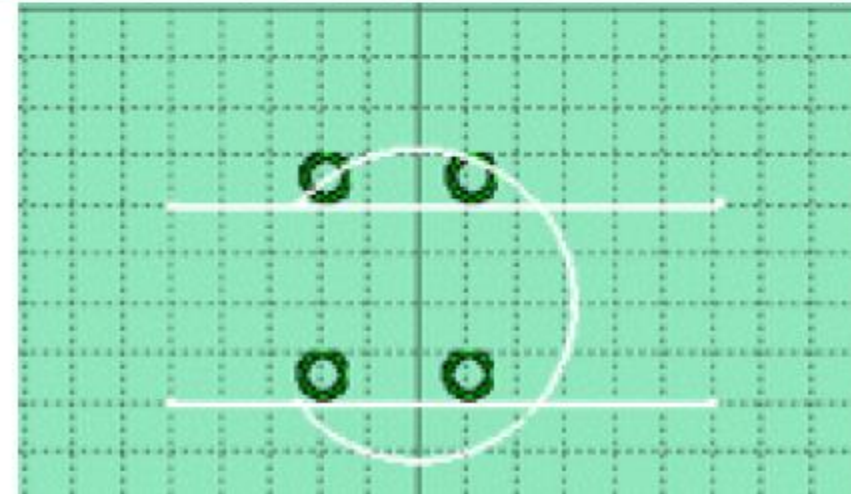
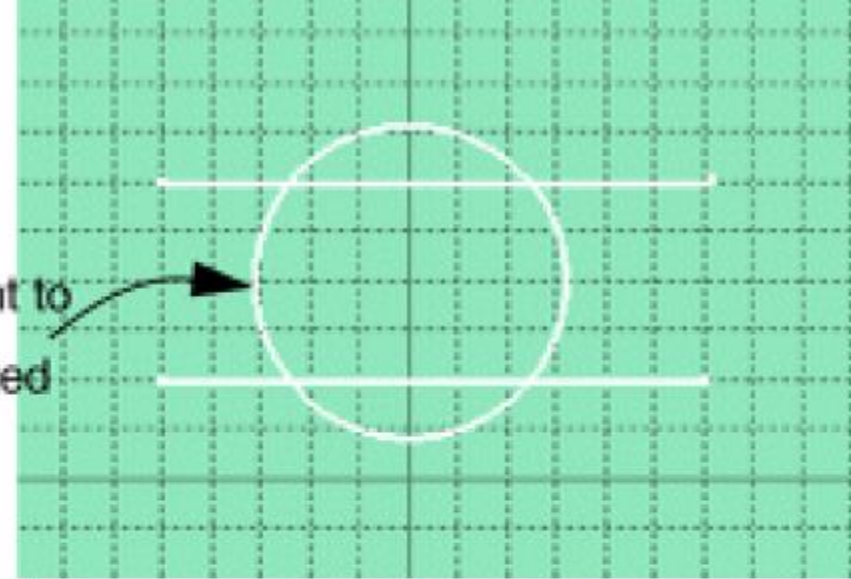
Second example



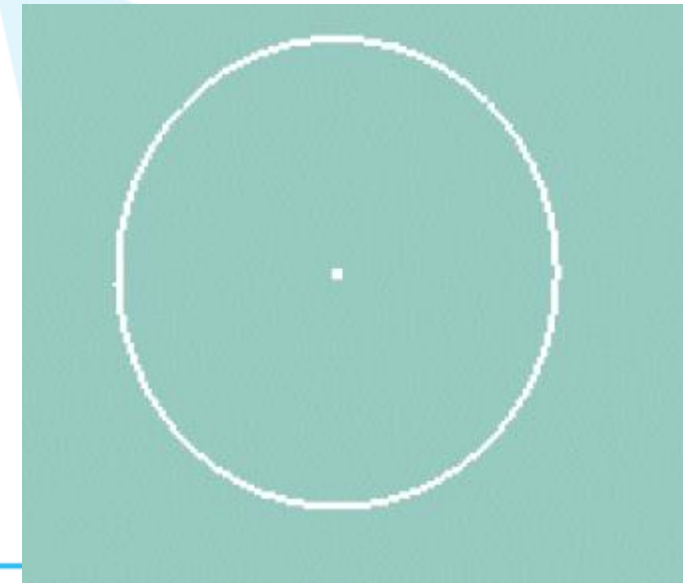
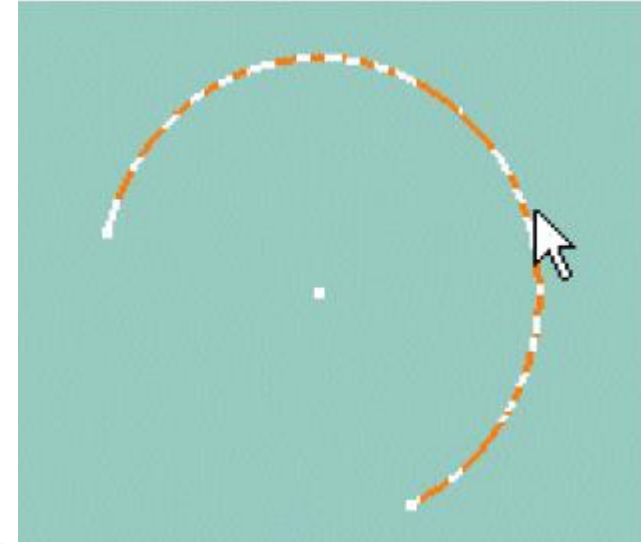
Breaking and Trimming



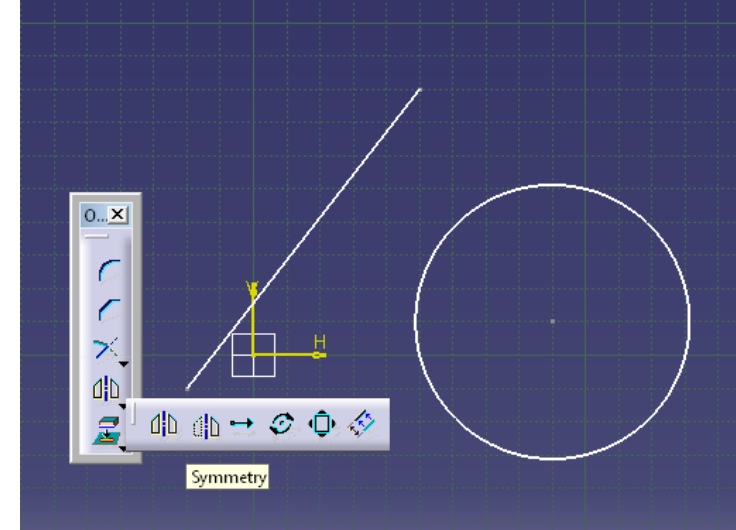
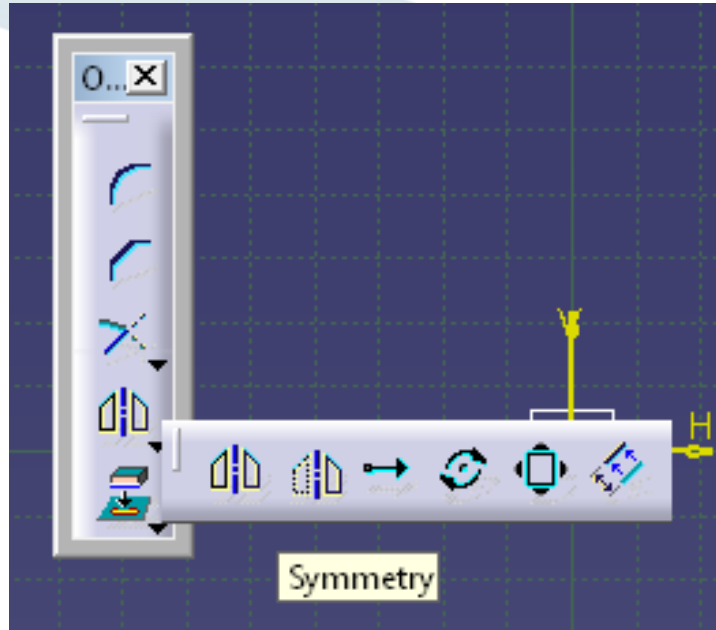
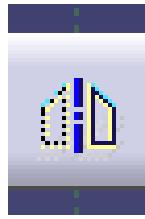
Segment to
be deleted



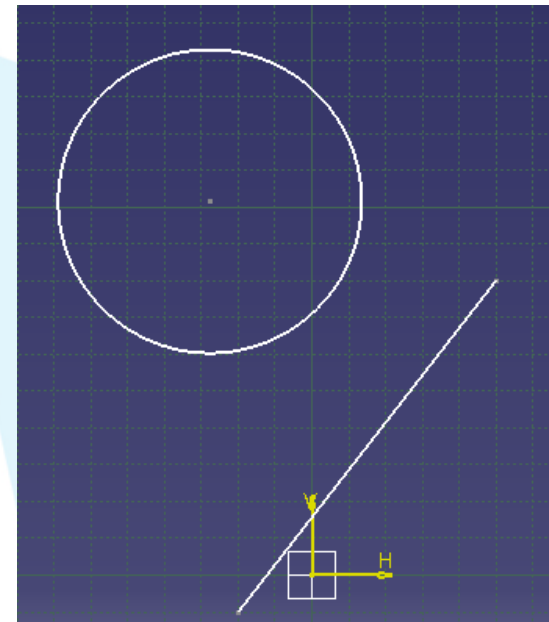
Closing Elements



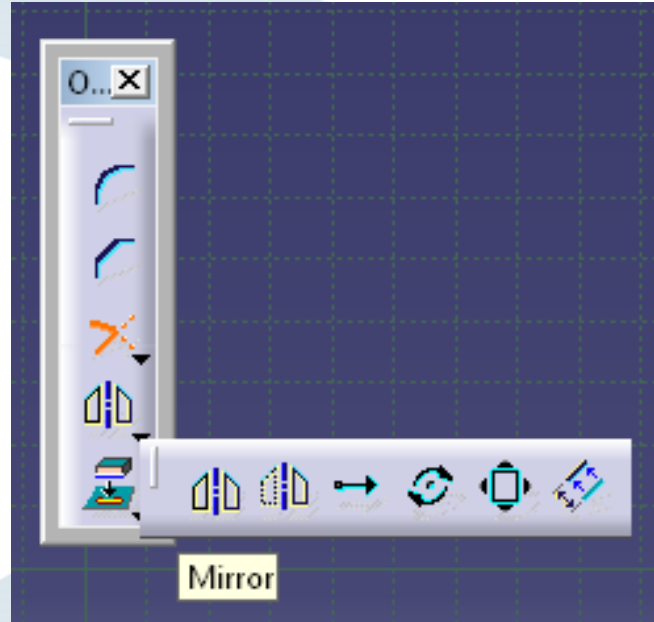
Creating Symmetrical Elements



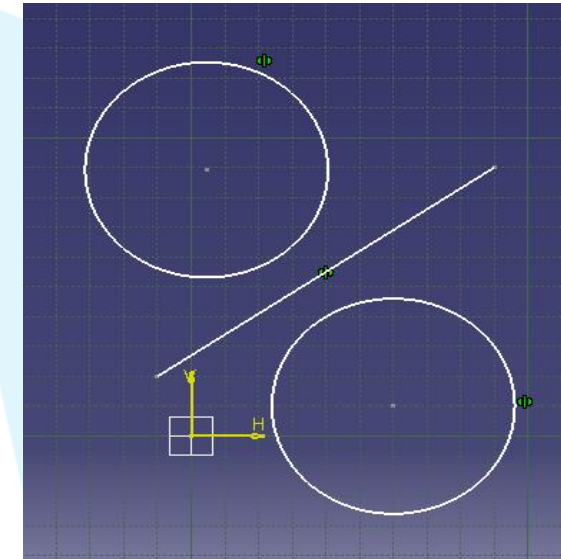
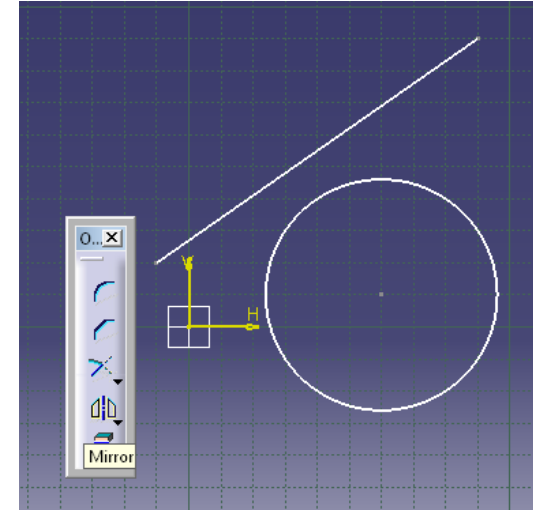
Symmetry



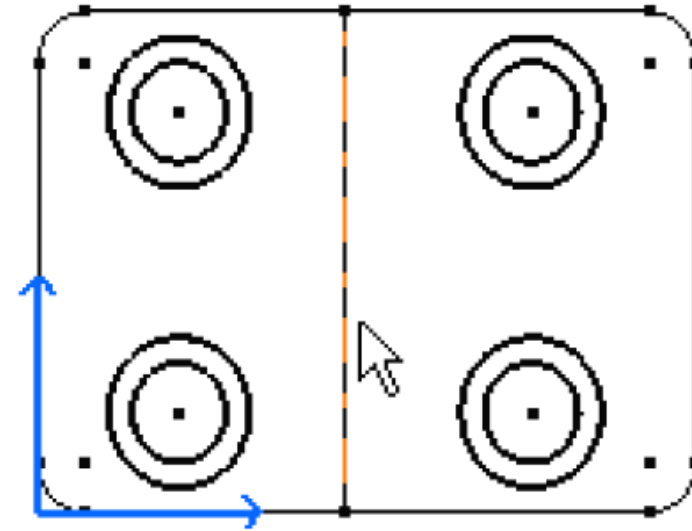
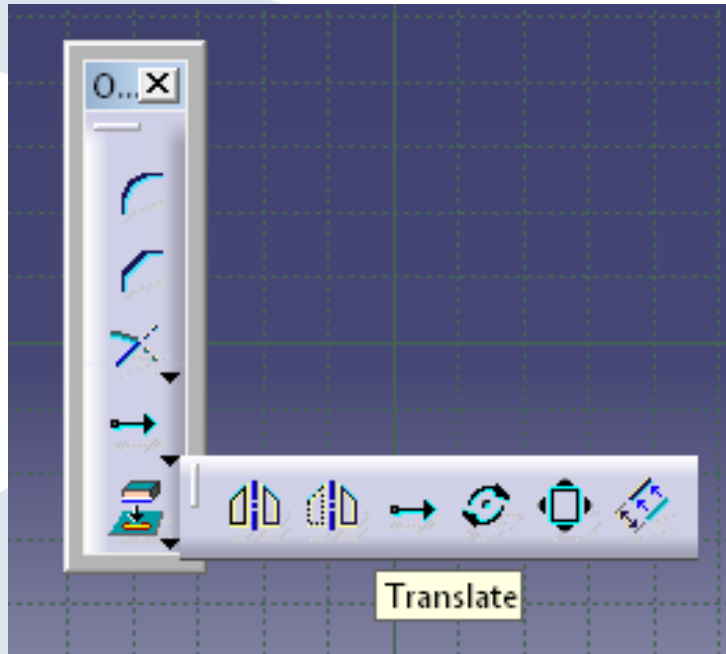
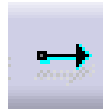
Creating Mirror Elements



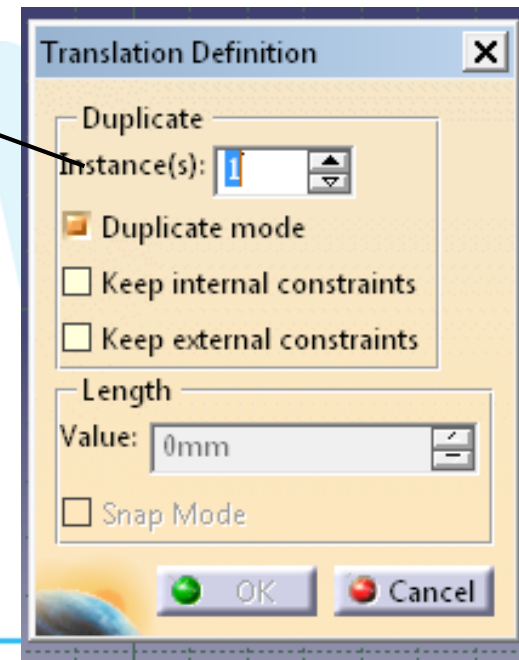
Mirror

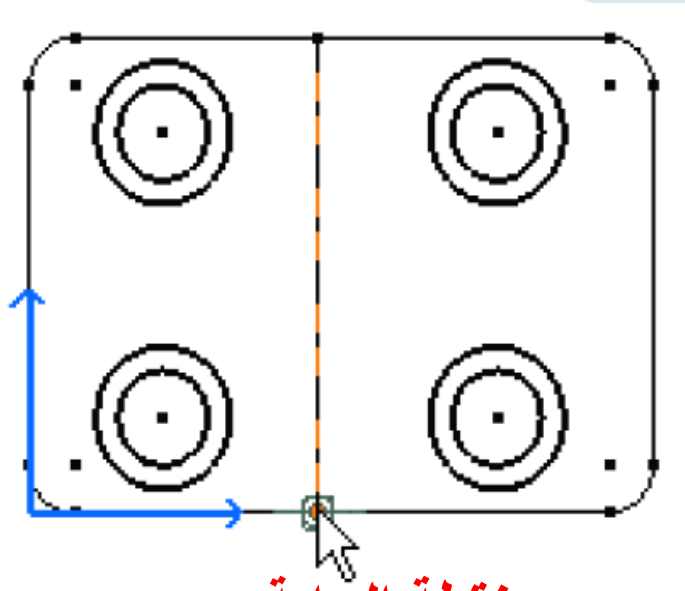
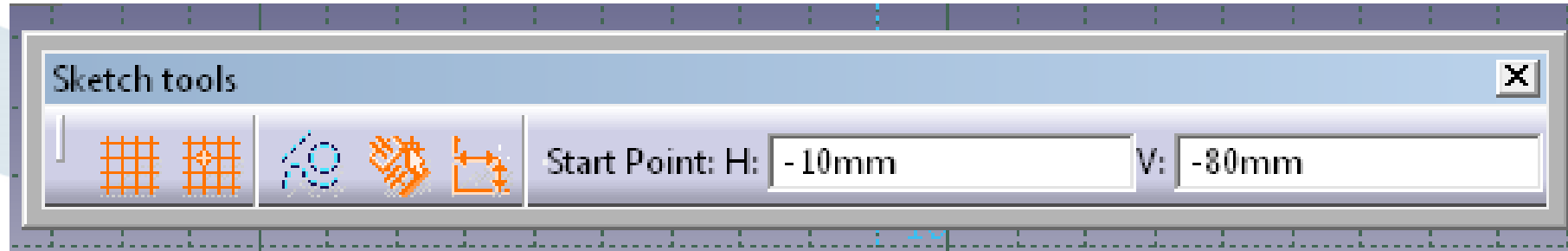


Translating Elements

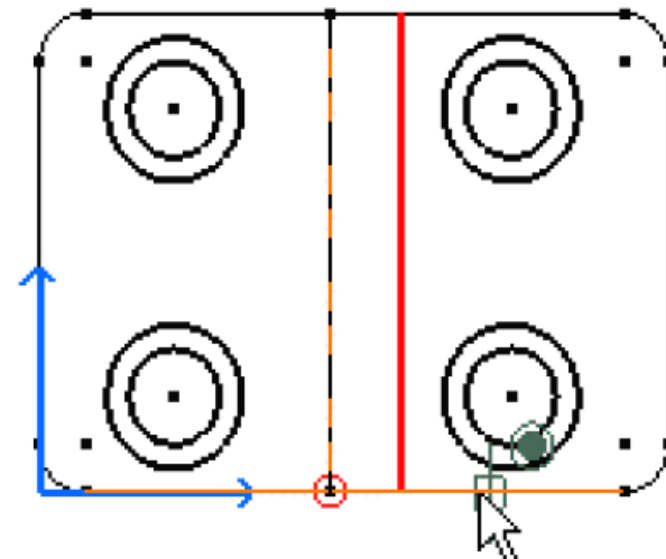
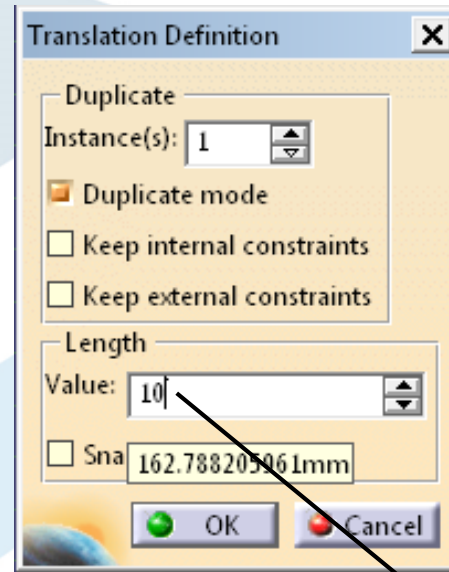


عدد النسخ





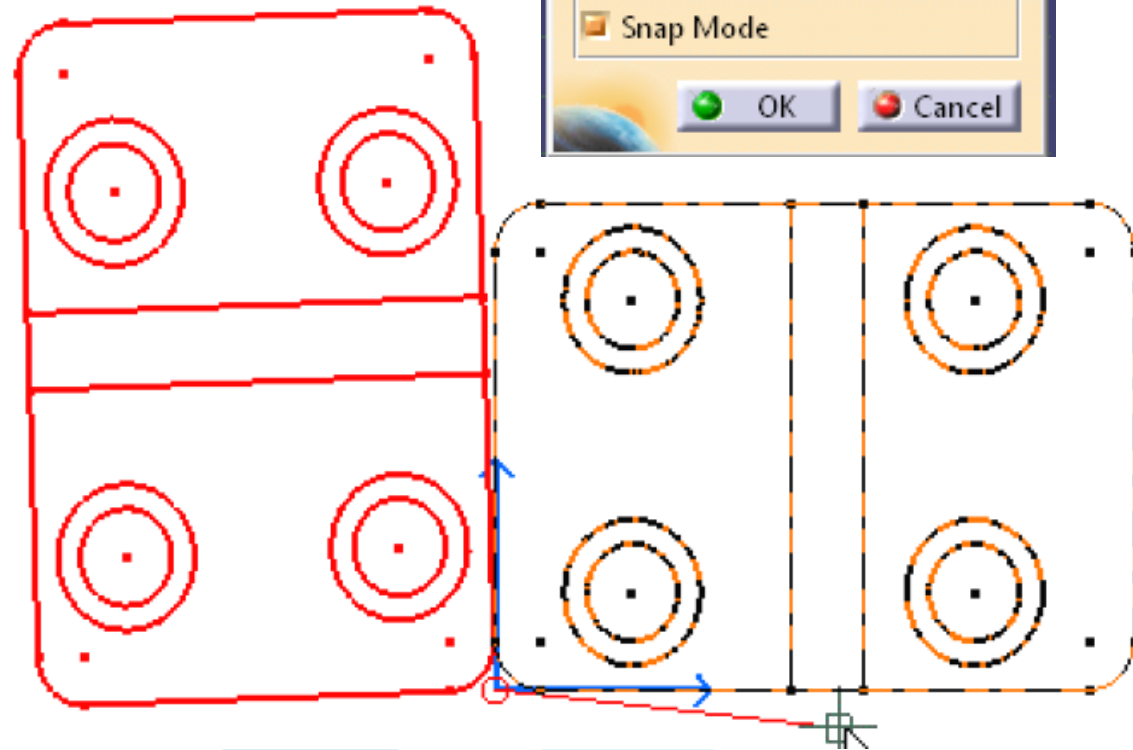
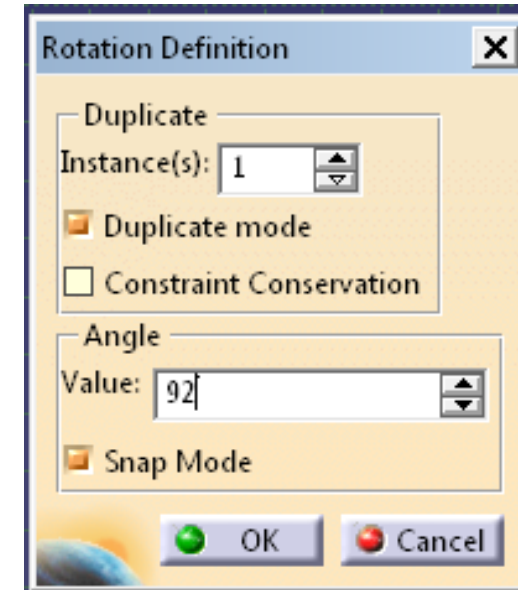
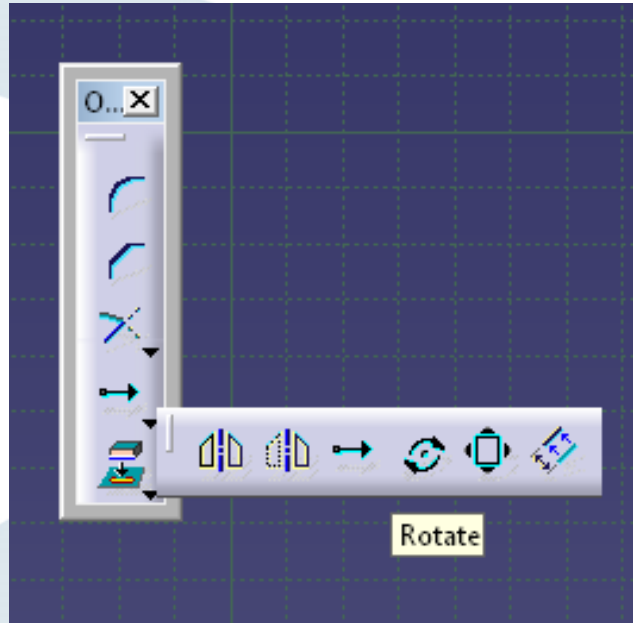
نقطة البداية



مسافة الانتقال



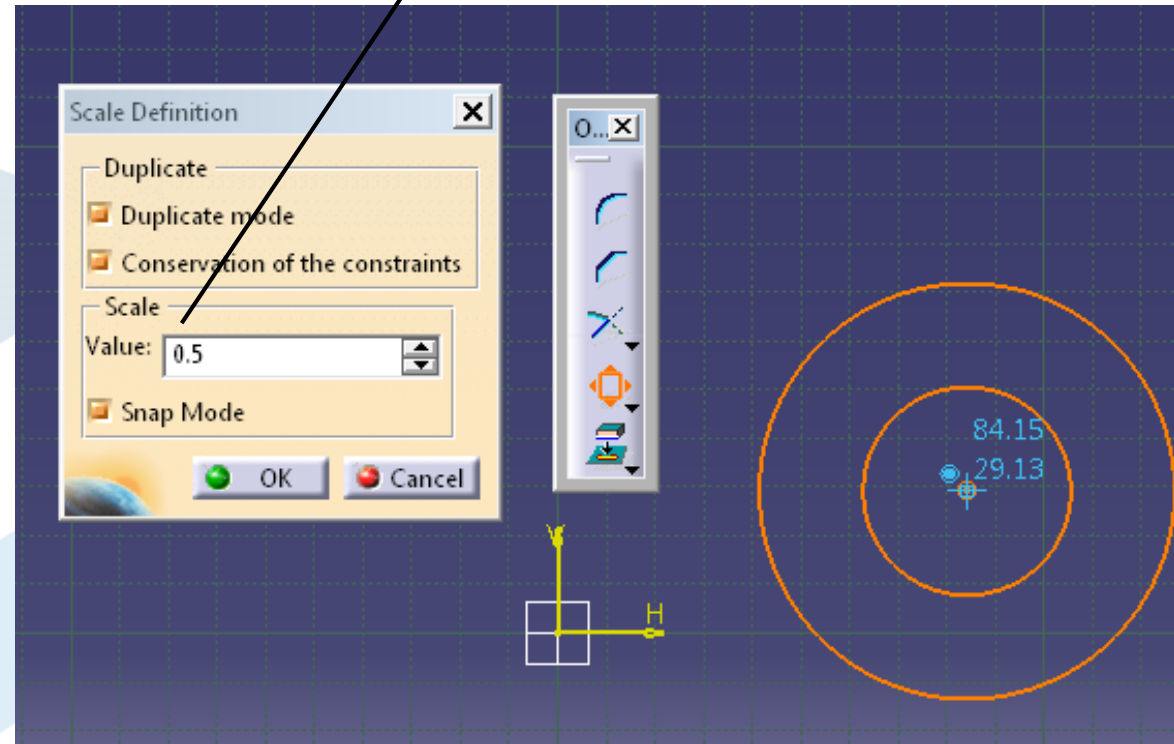
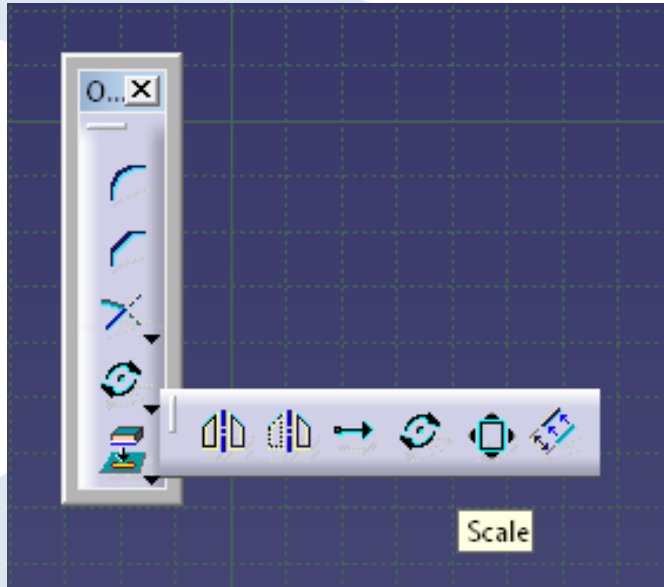
Rotating Elements



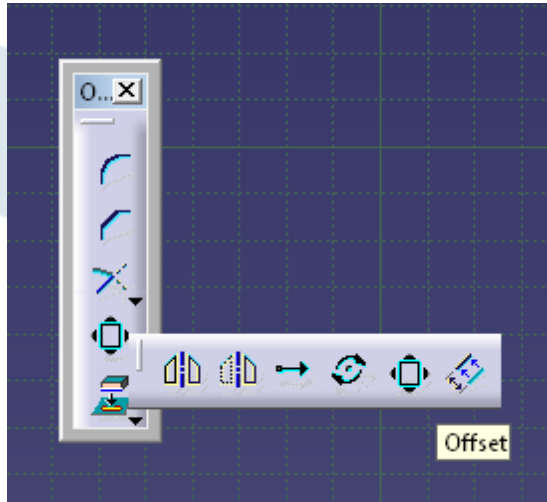
Scaling Elements



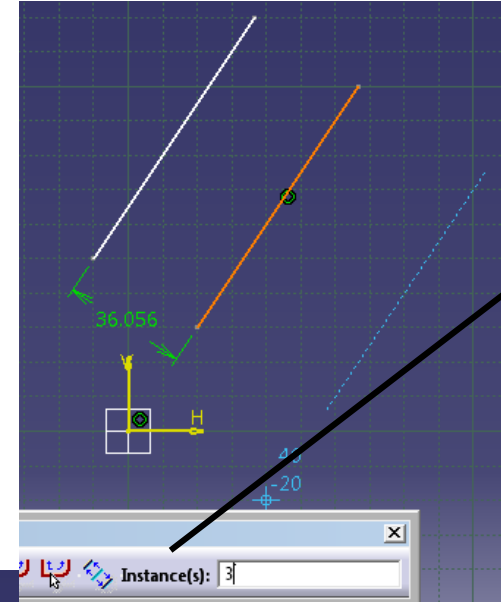
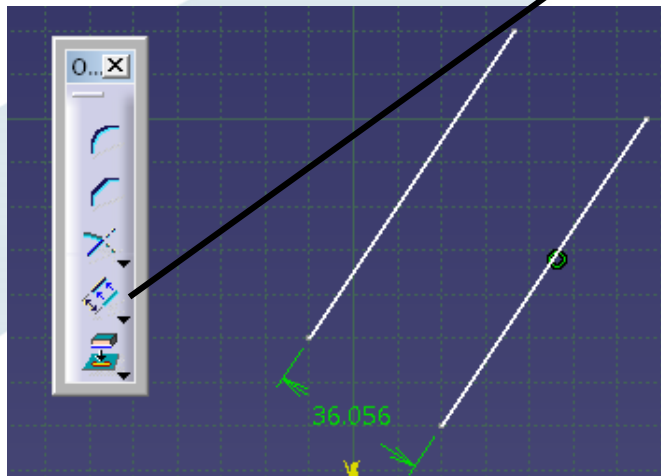
نسبة التكبير أو التصغير



Offsetting Elements



offset



عدد النسخ

