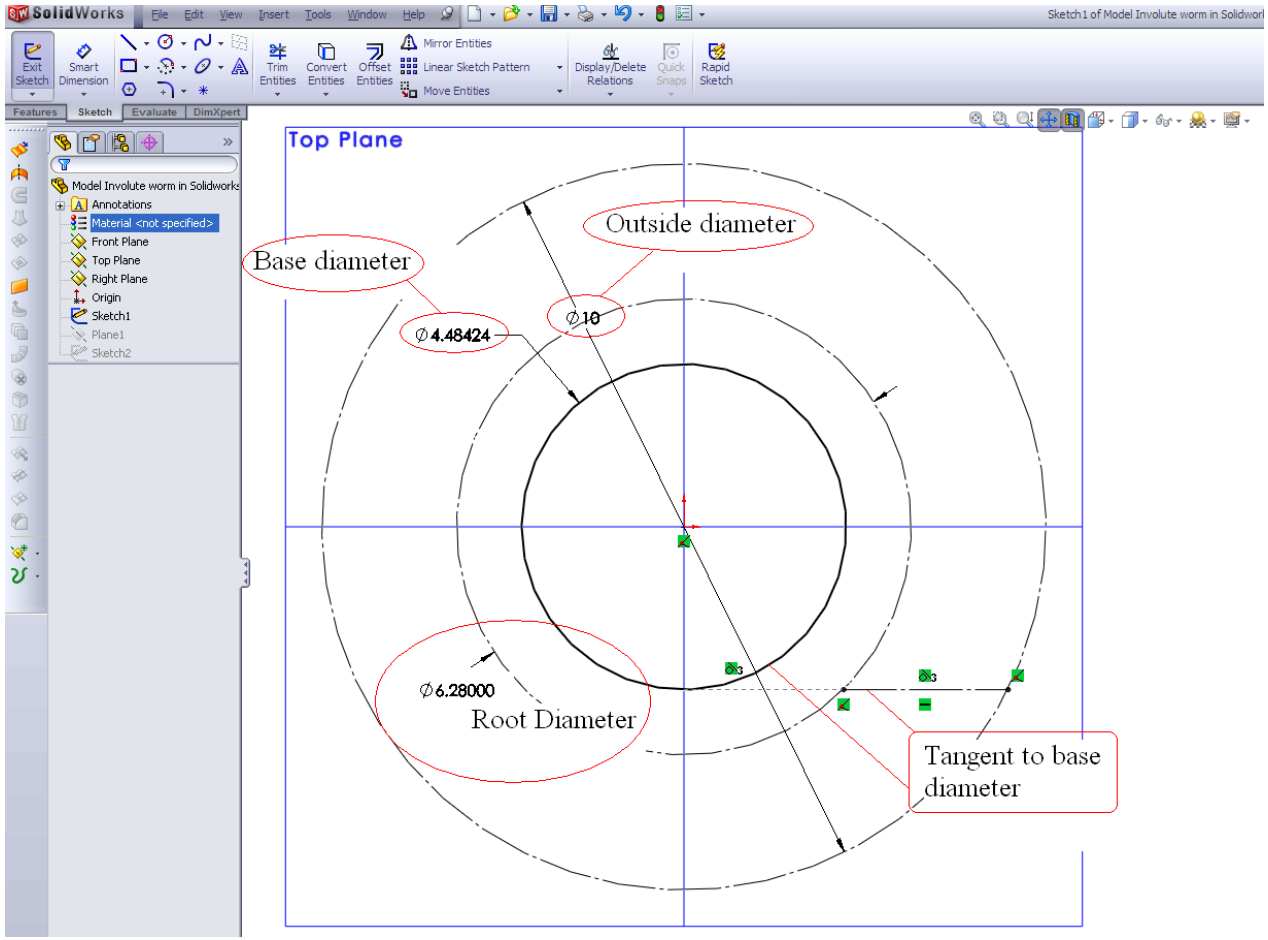
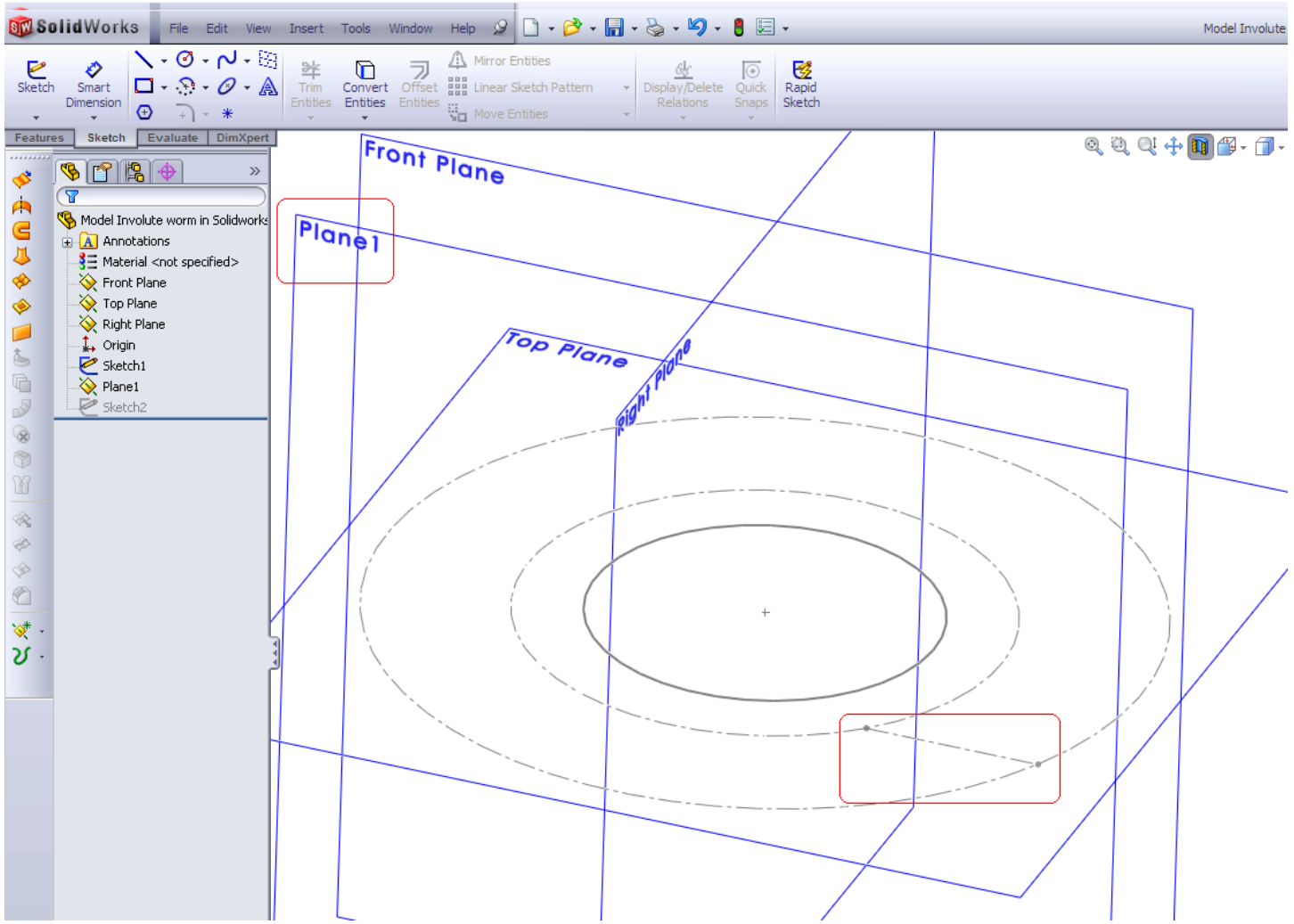
How to model an involute ZI worm using 3d CAD.
SolidWorks example.
Spiralbevel.com

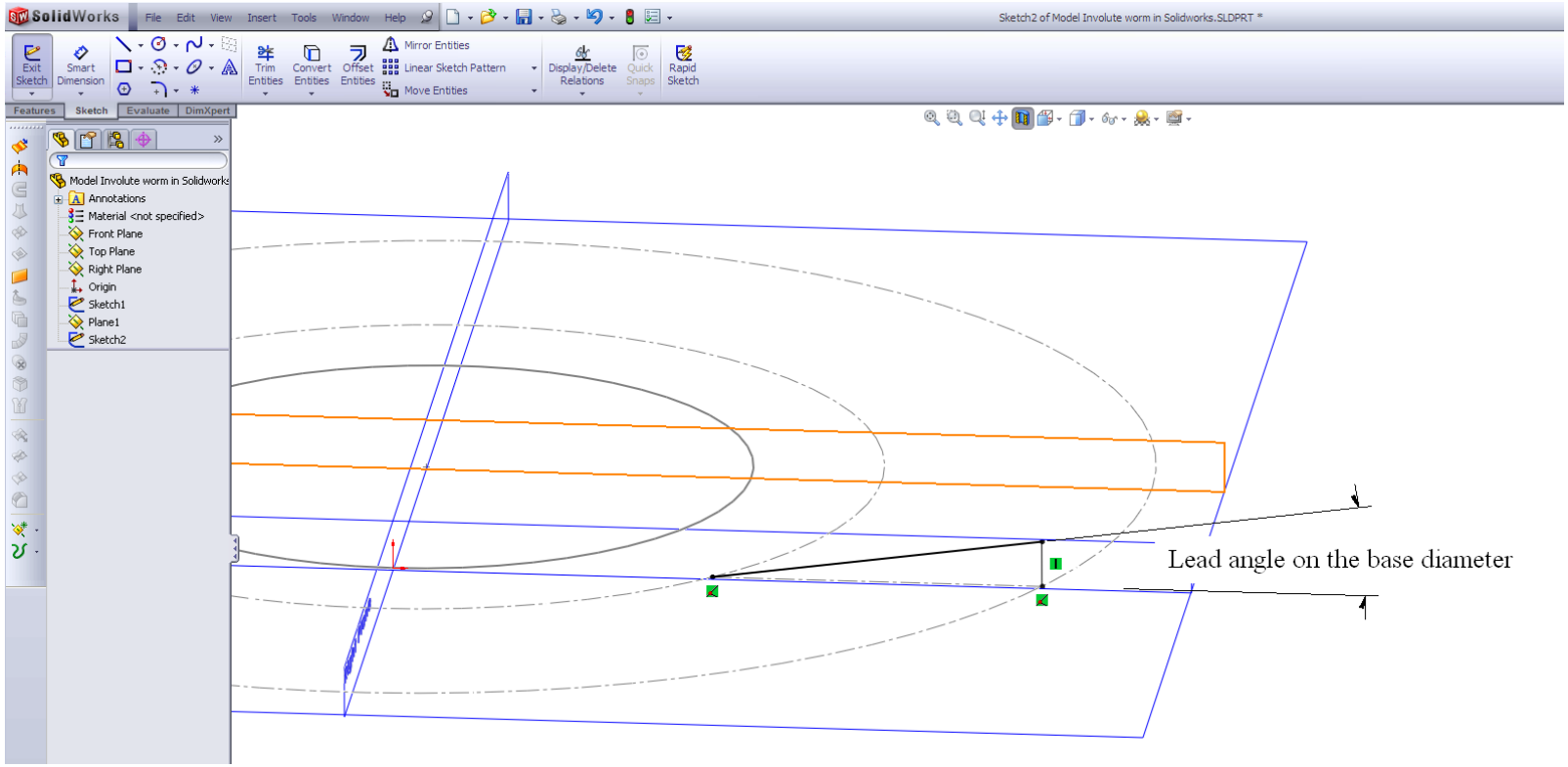
1. Draw the base diameter, root diameter, outside diameter and tangent to the base diameter.



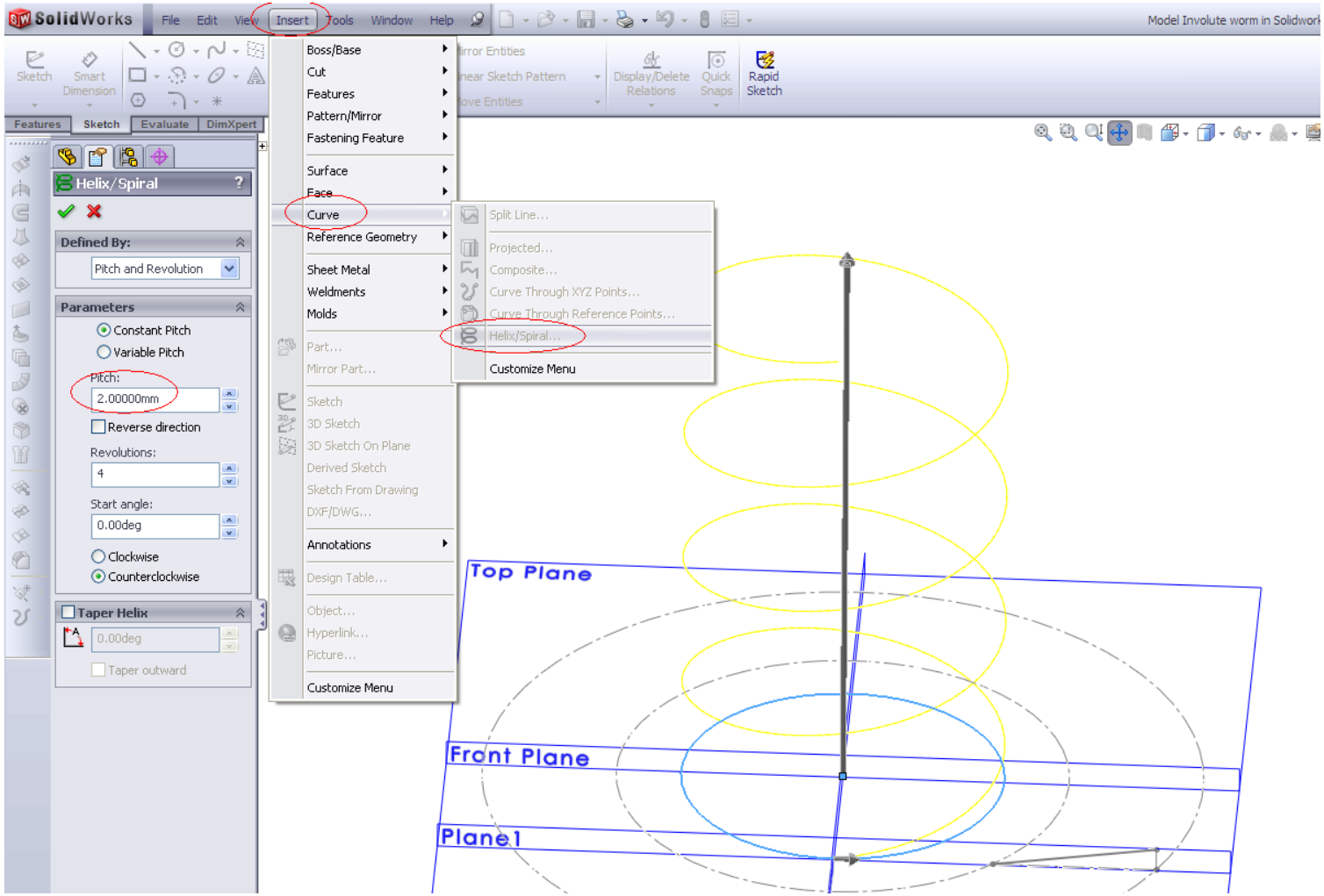
2. Add a new sketch plane through the tangent to the base diameter.



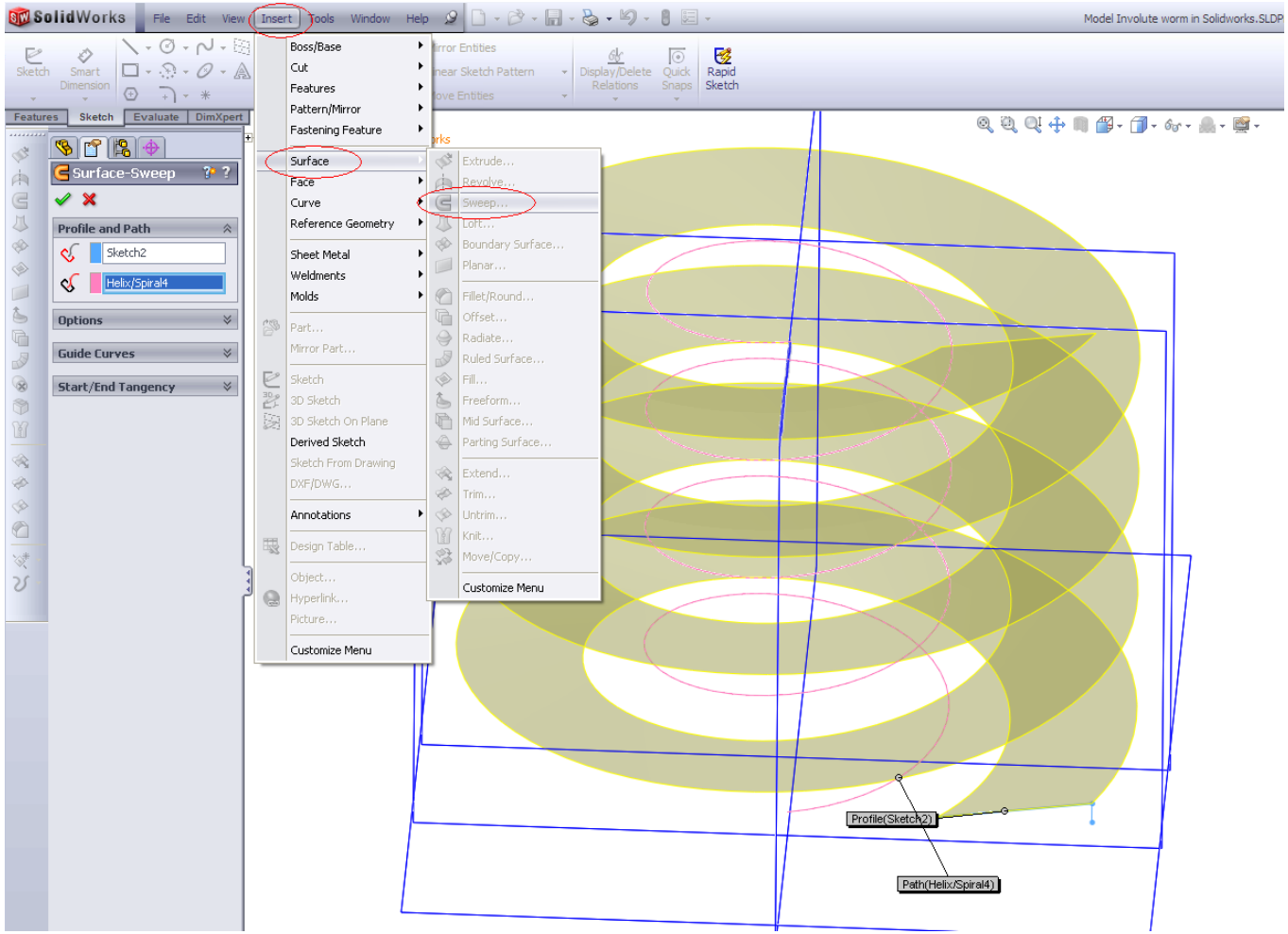
3. On the new sketch plane draw a line at lead angle on the base diameter.
You can calculate the lead angle on the base diameter from:
Angle = atn(lead/Pi/base diameter)



4. Draw a helix with pitch equal to the worm lead



5. Use Surface – Sweep to make involute helix – the flank of the involute ZI worm



Note, that this is a theoretical surface. This method is using the property of the involute helical surface – it is form by a straight line moving along a helix – like helical winding a string on a tube. However, the real production worm will have a protuberance on the root generated by the manufacturing tool. Contact spiralbevel.com to get software for accurate 3d CAD modeling of the realistic production worm.

Spiral Bevel Corporation. 2017.
Spiralbevel.com