Fitting Curve to 3 Tangents

lay - out of three tangents, required to fit curve of radius R

 $T1 = R * tan\alpha/2$ $T2 = R * tan\beta/2$

 $T1 + T2 = R (\tan \alpha/2 + \tan \beta/2)$

 $R = (T1 + T2) / (tan\alpha/2 + tan \beta/2)$

