



<u>GIVEN</u>	<u>SOLUTION</u>	<u>LEGEND</u>
$\Delta_L, \Delta_S, T_S, R_S$	$R_L = \frac{T_S \sin \Delta - R_S \text{Vers} \Delta + R_S}{\text{Vers} \Delta_L}$	P.C. - Point of Curvature
$\Delta_L, \Delta_S, T_L, R_L$	$R_S = \frac{T_L \sin \Delta - R_L \text{Vers} \Delta + R_L}{\text{Vers} \Delta_S}$	P.C.C. - Point of Compound Curvature
$\Delta_L, \Delta_S, R_L, R_S$	$T_L = \frac{R_L \text{Vers} \Delta - (R_L - R_S) \text{Vers} \Delta_S}{\sin \Delta}$	P.T. - Point of Tangency
$\Delta_L, \Delta_S, T_S, R_L$	$R_S = \frac{T_S \sin \Delta - R_L \text{Vers} \Delta_L}{\text{Vers} \Delta - \text{Vers} \Delta_L}$	R_L - Radius of Major Curve
$\Delta_L, \Delta_S, T_L, R_S$	$R_L = \frac{R_S \text{Vers} \Delta_S - T_L \sin \Delta}{\text{Vers} \Delta_S - \text{Vers} \Delta}$	R_S - Radius of Minor Curve
$\Delta_L, \Delta_S, T_L, T_S$	$R_S = \frac{T_S \sin \Delta - \tan 1/2 \Delta_L (T_L + T_S \cos \Delta)}{\text{Vers} \Delta - \sin \Delta \tan 1/2 \Delta_L}$	T_L - Long Tangent
Δ, T_L, T_S, R_S	$\tan 1/2 \Delta_L = \frac{T_S \sin \Delta - R_S \text{Vers} \Delta}{T_L + T_S \cos \Delta - R_S \sin \Delta}$	T_S - Short Tangent
Δ, T_L, T_S, R_L	$\tan 1/2 \Delta_S = \frac{R_L \text{Vers} \Delta - T_L \sin \Delta}{R_L \sin \Delta - T_L \cos \Delta - T_S}$	Δ - Total Deflection Angle of the Compound Curve = $\Delta_L + \Delta_S$
Δ, T_S, R_L, R_S	$\cos \Delta_L = \frac{R_L - T_S \sin \Delta - R_S \cos \Delta}{R_L - R_S}$	Δ_L - Deflection Angle of Major Curve
Δ, T_L, R_L, R_S	$\text{Vers} \Delta_S = \frac{R_L \text{Vers} \Delta - T_L \sin \Delta}{R_L - R_S}$	Δ_S - Deflection Angle of Minor Curve