

Roller Chain Drive Design Calculator		
Chain length, in pitches and exact length Calculator		
Blue cells editable		
number of teeth in the driving sprocket $N_1 =$	21.00	#
number of teeth in the driven sprocket $N_2 =$	76.00	#
center distance $C =$	470.000	mm
chain pitch $p =$	12.700	mm
Results		
Eq. 1, Chain length $L =$	124.59	pitches
Eq. 1 round up chain length nearest even integer $L =$	126.00	pitches
Eq. 2, exact center distance between sprockets $C =$	479.25	mm
Eq. 3, pitch diameter drive $D_1 =$	84.89	mm
Eq. 3a, pitch diameter drive $D_2 =$	307.23	mm
Eq. 4, angle of contact driving sprocket $\theta_1 =$	2.673	rad.
Eq. 4, angle of contact driving sprocket $\theta_1 =$	153.174	deg
Eq. 4a, angle of contact driving sprocket $\theta_2 =$	3.610	rad.
Eq. 4a, angle of contact driving sprocket $\theta_2 =$	206.826	deg