

TECNOLÓGICO DE MONTERREY
CAMPUS CHIHUAHUA

ERIC JOSUÉ RIVERA AGUIRRE
249283

MTRA. ILEANA CHAPARRO
TOPOGRAFÍA I

"CURVAS HORIZONTALES"

→ Calcule los elementos de la curva circular, así como una tabla de trazo.

$$\Delta = 24^{\circ} 30' \text{ derecha} \quad \frac{\Delta}{n} = \frac{24^{\circ} 30'}{2} = 6'$$

$$g = 4^{\circ}$$

$$PI = 2 + 402.21$$

1er Subcuerda

$$2+340 - 2+339.9967 = 3.3 \times 10^{-3}$$

$$\Delta_1 = (3.3 \times 10^{-3})(6') = 0^{\circ} 0' 1.19''$$

2da subcuerda

$$2+462.4967 - 2+460 = 2.4967$$

$$\Delta_2 = (2.4967)(6') = 0^{\circ} 14' 58.81''$$

$$R = \frac{10}{\sin(\frac{1}{2}(4^{\circ}))} = 286.5371 \text{ m}$$

$$ST = (286.5371 \text{ m}) \tan\left(\frac{24^{\circ} 30'}{2}\right) = 62.2133 \text{ m}$$

$$PC = 2 + 402.21 - 62.2133 = 2 + 339.9967$$

$$LC = \frac{24^{\circ} 30'}{4^{\circ}} (20) = 122.5 \text{ m}$$

$$PT = 2 + 339.9967 + 122.5 \text{ m} = 2 + 462.4967$$

$$d = \frac{24^{\circ} 30'}{2(81.6667)} = 0^{\circ} 9' 0''$$

→ Deflexión cuerdas 20m

$$\Delta = (20)(0^{\circ} 6') = 2^{\circ}$$

EST	PV	Deflexión	Datos de la curva
PT	2 + 462.4967	12° 15' 0"	PI = 2 + 402.21
2da sub	2 + 460	12° 0' 1.19"	PC = 2 + 339.9967
	2 + 440	10° 0' 1.19"	
3da sub	2 + 420	8° 0' 1.19"	PT = 2 + 462.4967
	2 + 400	6° 0' 1.19"	
	2 + 380	4° 0' 1.19"	
	2 + 360	2° 0' 1.19"	
1er sub	2 + 340	0° 0' 1.19"	R = 286.537m
	PC	0	
	2 + 339.9967		$\Delta = 24^{\circ} 30'$
			$g = 4^{\circ}$