

NAD27 – Colorado South Zone

Given Information:

Stormy	ϕ	37-46-00.660	$N(y)$	405,187.44
	λ	103-46-33.493	$E(x)$	2,498,328.68
			θ	+ 01-03-26.935
			k	0.9999461
Packers Gap	$N(y)$	396,257.17	ϕ	37-44-25.253
	$E(x)$	2,535,990.27	λ	103-38-46.757
			θ	+ 01-08-13.221
			k	0.9999467
Packers Gap ← Stormy → Seven		120-16-15.0		
Stormy ← Seven → Packers Gap		12-35-13.3		
Seven ← Packers Gap → Stormy		47-08-35.8		

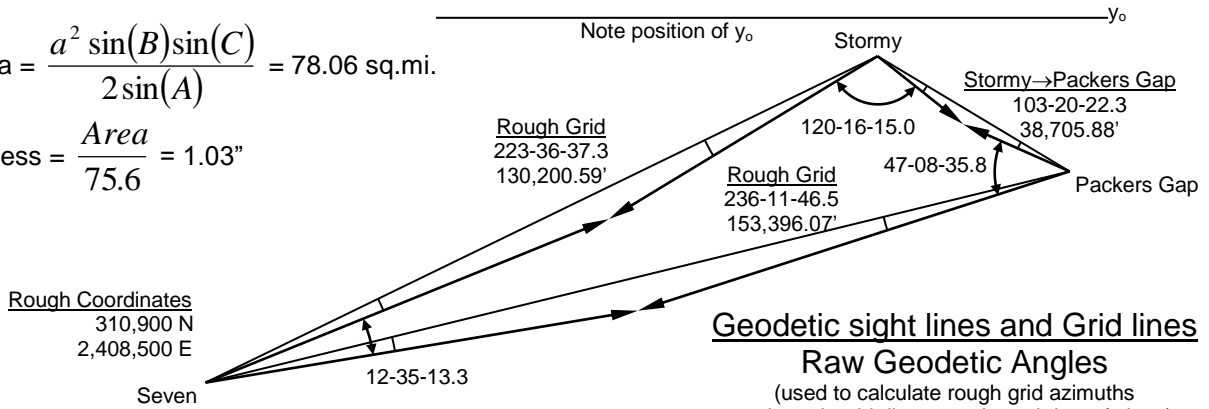
Find Point “Seven”

<u>Point “Seven”</u>	$N(y)$	310,913.46
	$E(x)$	2,408,520.04
	ϕ	37-30-43.587
	λ	104-05-29.542
	θ	+ 00-51-50.108
	k	0.9999611

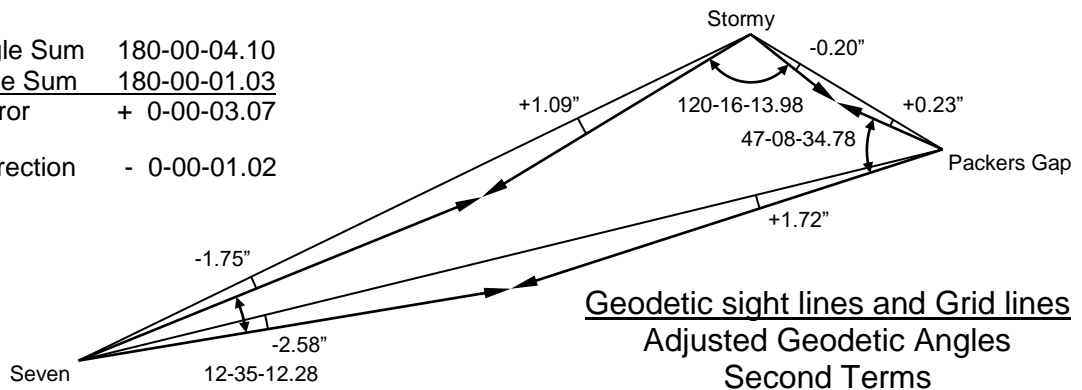
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$$\text{Area} = \frac{a^2 \sin(B)\sin(C)}{2 \sin(A)} = 78.06 \text{ sq.mi.}$$

$$\text{Excess} = \frac{\text{Area}}{75.6} = 1.03''$$



Measured Angle Sum	180-00-04.10
Spherical Angle Sum	180-00-01.03
Total Angle Error	+ 0-00-03.07
Per Angle Correction	- 0-00-01.02



$$\text{Grid Angle} = \text{Geodetic angle} - \theta'_{BS} + \theta'_{FS}$$

