

Given:

Point **ALLEN**

Point **THORNTON #2**

**Colorado North Zone NAD 83**

N<sub>1</sub> = 363,504.213  
 E<sub>1</sub> = 952,651.853  
 γ<sub>1</sub> = +00° 17' 19.8320"  
 R<sub>1</sub> = 7,587,444.435  
 φ<sub>1</sub> = 39° 51' 40.26577"  
 λ<sub>1</sub> = 105° 03' 10.68547"

N<sub>2</sub> = 364,626.654  
 E<sub>2</sub> = 958,933.900  
 γ<sub>2</sub> = \_\_\_\_\_  
 R<sub>2</sub> = \_\_\_\_\_  
 φ<sub>2</sub> = \_\_\_\_\_  
 λ<sub>2</sub> = \_\_\_\_\_

**Colorado Central Zone NAD 83**

γ<sub>1</sub> = +00° 16' 54.9779"  
 R<sub>1</sub> = 7,773,583.243  
 N<sub>1</sub> = 530,011.218  
 E<sub>1</sub> = 952,653.546

γ<sub>2</sub> = \_\_\_\_\_  
 R<sub>2</sub> = \_\_\_\_\_  
 N<sub>2</sub> = \_\_\_\_\_  
 E<sub>2</sub> = \_\_\_\_\_

Draw a diagram and determine:

**North Zone**

**Central Zone**

φ<sub>o</sub> = \_\_\_\_\_  
 R<sub>o</sub> = \_\_\_\_\_  
 N<sub>o</sub> = \_\_\_\_\_  
 Grid Azi<sub>12</sub> = \_\_\_\_\_  
 δ<sub>12</sub> = \_\_\_\_\_  
 Geod. Azi<sub>12</sub> = \_\_\_\_\_

= \_\_\_\_\_  
 = \_\_\_\_\_  
 = \_\_\_\_\_  
 = \_\_\_\_\_  
 = \_\_\_\_\_  
 = \_\_\_\_\_