DEFINING PARAMETERS

CLARKE SPHEROID OF 1866: (NAD 1927)

a = 6,378,206.4 meters **Semi-major axis**
b = 6,356,583.8 meters **Semi-minor axis**

Computed Values

1/f = 294.978698214 **Reciprocal flattening**
c = 6,399,902.5516 m Polar radius of curvature

GEODETIC REFERENCE SYSTEM 1980: (NAD 1983)

a = 6,378,137.000 meters **Semi-major axis**
1/f = 298.2572221008827 **Reciprocal flattening**

Computed values

b = 6,356,752.3141 m **Semi-minor axis**
c = 6,399,593.6259 m **Polar radius of curvature**

WORLD GEODETIC SYSTEM 1984: (GPS Computations)

a = 6,378,137.000 meters **Semi-major axis**
1/f = 298.257223563 **Reciprocal flattening**

Computed values

b = 6,356,752.3142 m **Semi-minor axis**
c = 6,399,593.6258 m **Polar radius of curvature**

IMPLICATION & CAUTION!

As ellipsoids, WGS84 and GRS80 (NAD83) are interchangeable. But WGS84 & NAD83 geocentric coordinates may not be compatible.

 Las Cruces, NM 88003