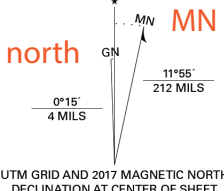


Produced by the United States Geological Survey
 North American Datum of 1983 (NAD83)
 World Geodetic System of 1984 (WGS84). Projection and
 1 000-meter grid: Universal Transverse Mercator, Zone 11S

star is true north

GN = grid north MN = magnetic north



Part of the USGS 7.5 minute topographic quadrangle map of Cajon, CA (2018)

- What is the vertical distance between two adjacent **index contours** on this map? _____ feet.
- What is the **contour interval** of this map? _____ feet.
- Examine the map to find the **highest** elevation. The highest elevation is between _____ and _____ feet above sea level, and is located (approximately) _____.
- Examine the map to find the **lowest** elevation. The lowest elevation is between _____ and _____ feet above sea level, and is located (approximately) _____.
- What is the total relief in this map area? Relief is between _____ and _____ feet.
- At what angle west of true north are the yellow UTM-grid-N-S lines printed? _____°.
- What is the bearing (or azimuth) from Gaging Station 1 to Gaging Station 2 (Hint: a number from 0 to 360°)? _____°.
- How widely spaced are adjacent yellow UTM grid lines (either the N-S or E-W lines)? _____ km
- What is the distance between Gaging Station 1 and Gaging Station 2? Show your work. _____ km

What are the UTM coordinates of Gaging Station 1 (GS1)? Zone 11S, _____ mE, _____ mN
 GS1 is 383.5 mm from the east edge of the map (longitude -117.375°) and the map through GS1 is 482.5 mm wide. What is the longitude of GS1? _____°

The San Andreas fault zone is marked by a linear valley that extends across the map area. What is the approximate azimuth of the San Andreas fault in this map area? ~ _____°