

Mazatlan I

You are on vacation in the city of Mazatlan, on the west coast of Mexico, which happens to be very nearly on the Tropic of Cancer. If you go outside at night to look at the stars, what will be the elevation of Polaris, the north star?

1. 90°
2. 67°
3. 23°
4. 0°

Mazatlan II

You are on vacation in the city of Mazatlan, on the west coast of Mexico, which happens to be very nearly on the Tropic of Cancer. If you go outside at night to look at the stars, what will be the azimuth of Polaris, the north star?

1. 90°
2. 67°
3. 23°
4. 0°

Rio de Janeiro

You are on vacation in the city of Rio de Janeiro, in Brazil, which happens to be very nearly on the Tropic of Capricorn. If you go outside at night to look at the stars, what will be the elevation of Polaris, the north star?

1. 90°
2. 67°
3. 23°
4. 0°

General rule: the elevation (angle above the horizon) of Polaris, the north star, is equal to the latitude of the observer.

