

## 7 ANGLES, AZIMUTHS, AND BEARINGS

Asterisks (\*) indicate problems that have partial answers given in Appendix G.

### 7.1 Define the different reference meridians that can be used for the direction of a line.

See Section 7.4.

**Geodetic or true:** Reference to geodetic north, which is referenced to the average position of the poles between 1900.0 and 1905.0

**Astronomic:** Reference meridians taken from instantaneous position of Earth's pole, which wanders over time.

**Magnetic:** Reference meridian taken from current position of magnetic poles.

**Grid:** Reference meridian chosen from some map projection system such as the state plane coordinate system where all meridians are parallel to the central meridian of the projection.

**Record or deed:** Reference meridian selected from a recorded deed by using the value given for one line in the deed.

**Assumed:** A value of  $0^\circ$  arbitrarily assigned to a line on the ground.

### 7.2 List the three basic requirements in determining an angle.

From Section 7.1, paragraph 2:

"...they are (1) *reference or starting line*, (2) *direction of turning*, and (3) *angular distance* (value of the angle)."