

Angle of Declination

NAME _____

Fill in the blanks with measures of your choosing and answer the following questions.

1. The pilot of a small airplane flying _____ above the ground notices a village off the left wing at an angle of declination of _____. Another village appears off the right wing at an angle of declination of _____. How far apart are the villages?

(a) If realistic limits are imposed on the height at which the airplane is flying, what are they?

(b) If realistic limits are imposed on the angles of declination, what are they?

(c) If the height is held constant, how will your choice of angles affect the calculated distance between the villages?

(d) If the angles are held constant, how will your choice of height affect the calculated distance between the villages?

2. Lynn, a real estate agent, wants to make a scale drawing of a triangular lot that is to be listed. The frontage along the street is known. What other measures will she need to make the drawing and to calculate acreage? What steps would you advise Lynn to take to assure that she accurately and expediently determines the information needed?
