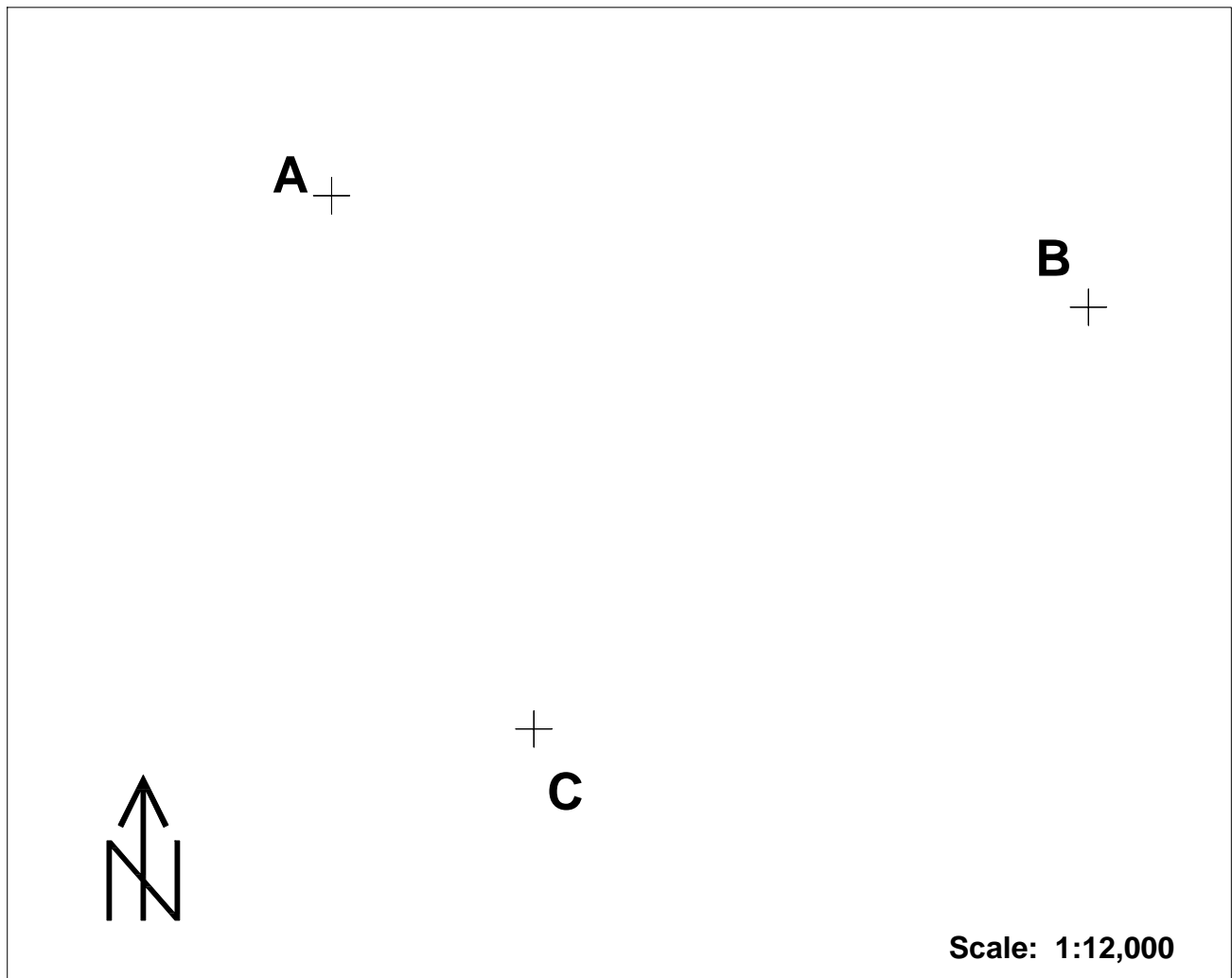


## ES302 Map Measurement and Location Exercise

Task1: Using the map below, fill in the data table with azimuth and distance measurements between point A, B, and C. Note the north arrow and scale of the map. Use an engineers scale and protractor to make your measurements. The UTM coordinates of the southwestern corner of the map are: Easting = 481,000 m E. Northing = 4,956,000 m N.

From	To	Azimuth (decimal degrees)	Distance (km)	UTM Coordinates	
				Easting (m)	Northing (m)
C	B	_____	_____		
B	A	_____	_____	Pt A _____	_____
A	C	_____	_____	Pt B _____	_____
C	A	_____	_____	Pt C _____	_____
B	C	_____	_____		

Task 2: Using an engineer's scale and two drawing triangles, measure, locate, and draw "point D", exactly 545 m south of point A. Mark on your map and show your measurements.



Task 3: Locate points A, B, and C on the Monmouth 7.5-minute Quadrangle map available in the room. Do they occur on the quad? or another quad? What geographic locations are they closest to?