VD 6.1.1

The distance between City A and City B is x miles apart. If the bearing of city A from city B is $bearing_1$, the bearing of city A from city C is $bearing_2$ and the bearing of city B from city C is $bearing_3$. Find the distance between City B and City C as well as the distance between City A and City C based on the given.

Distance AB (miles)	$bearing_1$	$bearing_2$	$bearing_3$	BC and AC (miles)
600	N 45 W	N 50 E	N 78 E	BC = 1273.17 AC = 1071.85
750	N 60 E	N 15 W	N 80 W	BC = 799.33 AC = 531.93
720	S 25 E	S 30 W	S 75 W	BC = 834.09 AC = 1002.76
900	N 75 W	N 50 W	N 65 E	BC = 419.70 AC = 638.31
350	N 80 E	N 15 E	N 40 W	BC = 387.24 AC = 370.03
400	N 25 E	N 76 E	S 30 E	BC = 323.39 AC = 340.87
300	S 70 W	S 20 W	S 45 E	BC = 253.57 AC = 300