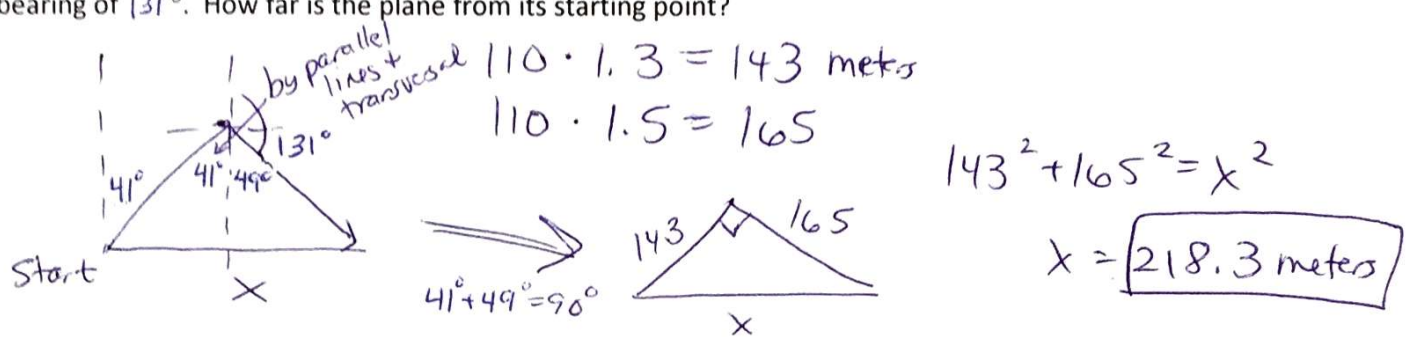


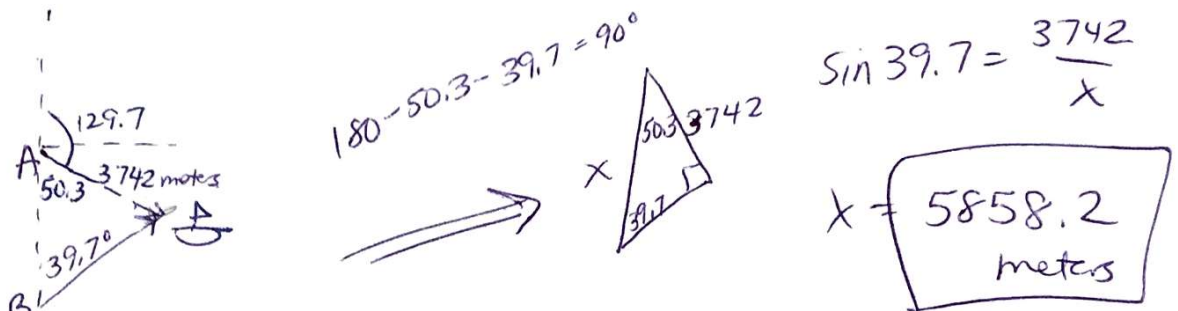
IB Mathematics SL

Section 11.2 Bearing Extra Practice

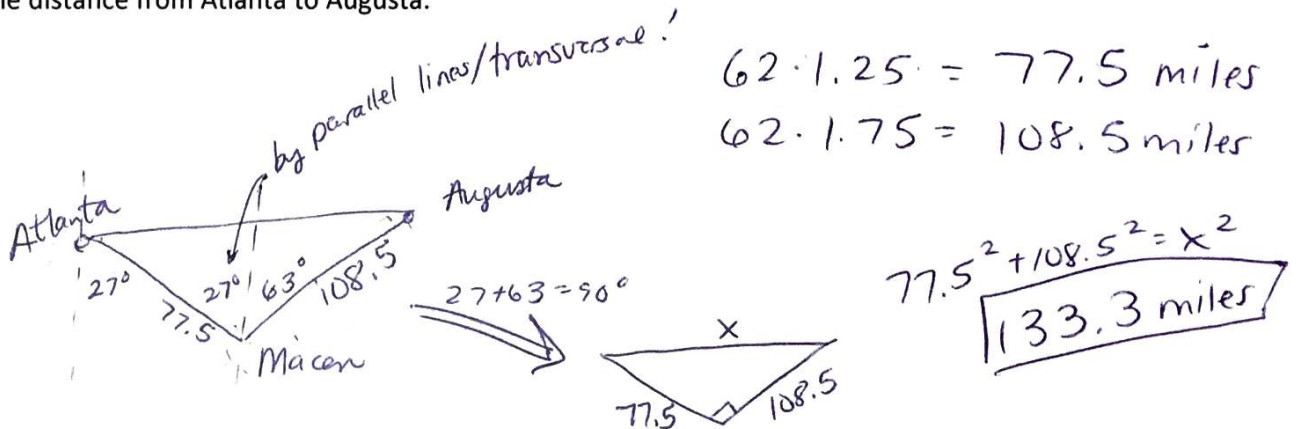
- 1) A plane flies 1.3 hours at 110 mph on a bearing of 41° . It then turns and flies 1.5 hours at the same speed on a bearing of 131° . How far is the plane from its starting point?



- 2) Two lighthouses are located on a north-south line. From lighthouse A, the bearing of a ship 3742 m away is 129.7° . From lighthouse B, the bearing of the ship is 39.7° . Find the distance between the two lighthouses.



- 3) The bearing from Atlanta to Macon is $S 27^\circ E$ and the bearing from Macon to Augusta is $N 63^\circ E$. An automobile traveling at 62 mph needs 1.25 hours to go from Atlanta to Macon and 1.75 hours to go from Macon to Augusta. Find the distance from Atlanta to Augusta.



- 4) Radio direction finders are set up at two points A and B, which are 2.5 miles apart on an east-west line. From A, it is found that the bearing of a signal from a radio transmitter is $N 26.3^\circ E$, while from B the bearing of the same signal is $N 53.7^\circ W$. Find the distance of the transmitter from B.

