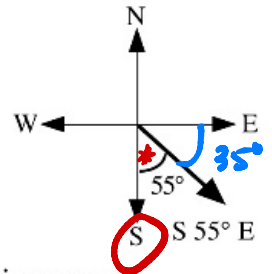


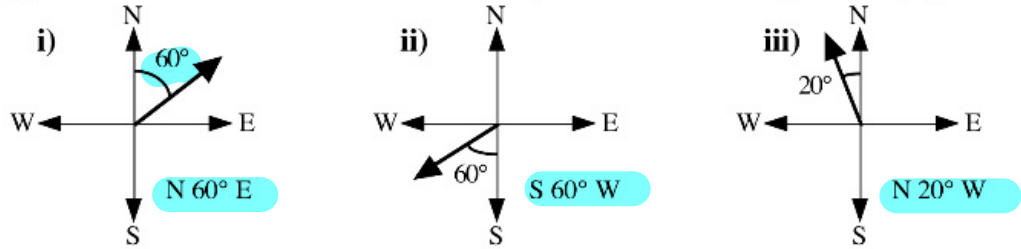
An Alternative Way of Describing a Direction

There are other ways of describing a course. A bearing of 125° is the same as 55° E of S (read as "55° East of South").



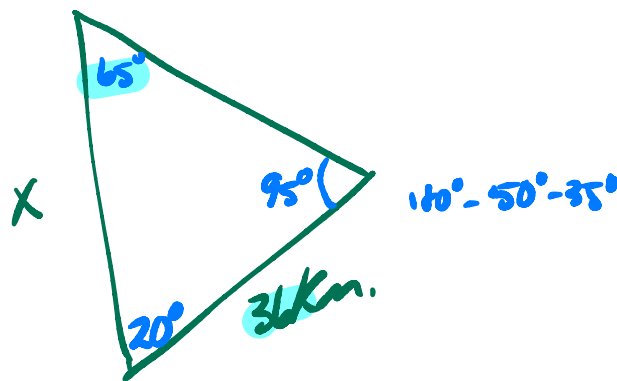
The direction can also be given as S 55° E.

The diagrams below show the course followed by the aircraft on the previous page.



A ship observes a lighthouse in a direction 50° W of N. After sailing 36 km in a direction 35° W of S, the lighthouse is observed in a direction 15° E of N.

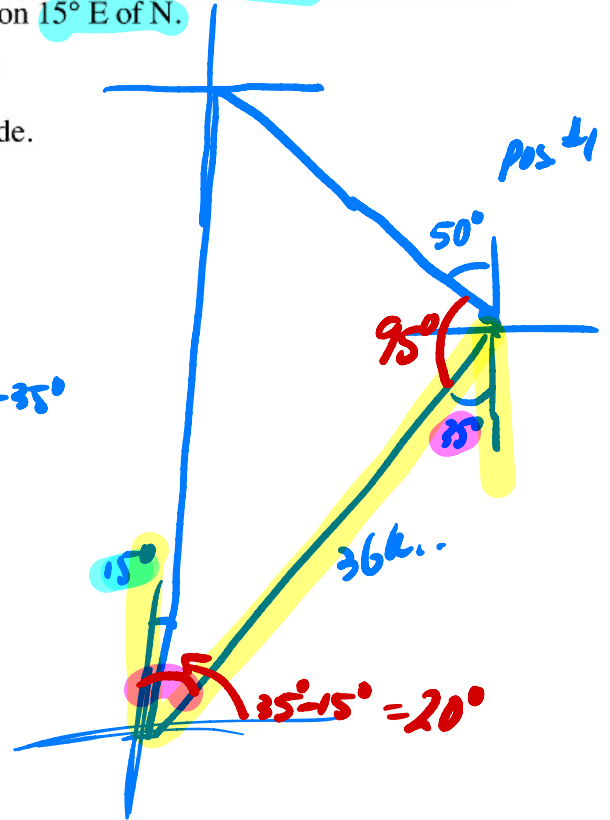
- a) Draw a sketch showing the information given.
- b) Calculate the distance of the ship from the lighthouse when the second observation is made.



$$\frac{\sin 65^\circ}{36} = \frac{\sin 95^\circ}{X}$$

$$X \sin 65^\circ = \frac{36 \sin 95^\circ}{\sin 65^\circ}$$

$$X = 40 \text{ km}$$



$$\# 7-16$$

Complete Assignment Questions #6 - #16 and the Group Work