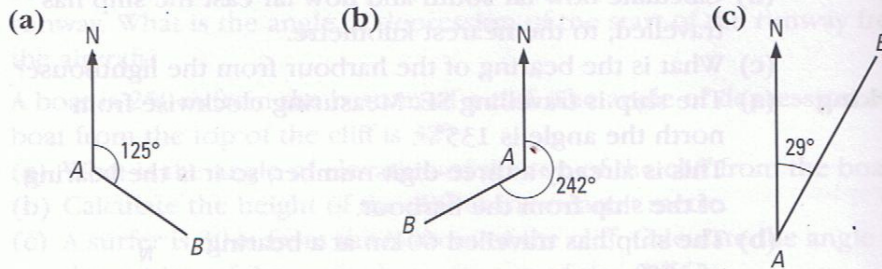


Trigonometry

Question Bank-Bearings

- A. 1** For each case write down the bearing of B from A.

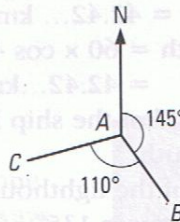


- 2** Use a ruler and a protractor to draw the following bearings. Remember to mark north on your diagram.

- (a) 090° (b) 225° (c) 133° (d) 015°
 (e) 180° (f) 300°

- B. 1** Calculate the bearing of:

- (a) B from A
 (b) C from A
 (c) A from B
 (d) A from C.



- C. Use trigonometry to answer the following questions.**

- A plane flies 180 km at a bearing of 016.3° . To four significant figures, how far north of its original position is it?
- A yacht sails 37 km at a bearing of 111° . Calculate how far east of its original position it is, to the nearest one hundred metres.
- Jøel cycles 13 km due west and then cycles 170 km due north. What is the bearing of his final position from his original position to one decimal place?
- Sandie walks 857 m at a bearing of 330° . Then she walks 242 m at a bearing of 062° . To the nearest metre, how far north of her original position is she?

- D. Use trigonometry to answer the following questions.**

- A boat takes passengers on a tour of some islands. The boat begins at island A and goes 33 km on a bearing of 073° to reach island B. The boat then moves on to island C which is 44 km away on a bearing of 163° from island B.
 - To one decimal place, how far north of island A is island B?
 - To one decimal place, how far east of island A is island B?
 - Calculate the angle ABC.
 - Calculate the distance between A and C.
- An aircraft takes off from point A and flies 140 km due east. It then turns due south and flies for another 80 km to reach point B.
 - Calculate the distance between A and B to one decimal place.
 - Calculate the bearing of B from A to one decimal place.