

Compass Questions 1

47261

- Q1** A ship sails from port X to port Y on a bearing of 075° for a distance of 60 nm.
 (i) How far **north** of port X is the ship?
 (ii) How far **east** of port X is the ship?
- Q2** Matthew flies 100 km due south and then turns to fly on a bearing of $N52^\circ E$ until he is due east of his original position, P.
 Find the distance Matthew is now from P.
- Q3** A plane flies 1500 km on a bearing of 247° from its home base.
 (i) How far south is the plane from its home base?
 (ii) How far west is the plane from its home base?
- Q4** Jake spots a ship at 308° from his position. Kirsty is 1.5 km due north of Jake and notes the ship is due west of her.
 (i) How far is the ship from Jake (to the nearest metre)?
 (ii) How far is the ship from Kirsty (to the nearest metre)?
- Q5** Teresa hikes 18 km on a bearing of $S42^\circ W$ from home.
 Find how far south of home Teresa is.
- Q6** Matthew travels 435 km on the bearing $S35^\circ E$ from Alice Springs.
 How far east is Matthew of Alice Springs when he completes his journey?
- Q7** A large rock is sighted by Emilie at $N56^\circ W$ from her original position. After travelling due west for 153 km, Emilie now sights the rock as being due north of her.
 (i) How far from the rock is Emilie now?
 (ii) How far from the rock was Emilie's original position?
- Q8** Julia travels 58 km due south and then turns and travels due east. After a while she stops and takes a bearing back to her starting point and finds that its bearing is 310° from her present position.
 (i) Find the distance that Julia travelled east.
 (ii) Find the distance (in a straight line) that she is from her starting point.

ANSWERS

- A) 12.9 km
 B) 13.4 km
 C) 15.2 nm
 D) 15.5 nm
 E) 54.3 nm
 F) 58.0 nm
 G) 60.2 km
 H) 69.1 km
 I) 88.4 km
 J) 90.2 km
 K) 98.7 km
 L) 103.2 km
 M) 126.8 km
 N) 128.0 km
 O) 163.9 km
 P) 184.6 km
 Q) 249.5 km
 R) 293.5 km
 S) 378.6 km
 T) 586.1 km
 U) 1378.2 km
 V) 1380.8 km
 W) 1920 m
 X) 2436 m
 Y) 2587 m
 Z) 2594 m