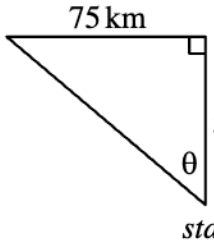
Compass Questions 2

Q1

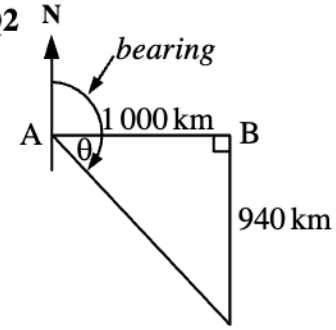


$\tan\theta = \frac{75}{50}$

$\theta = 56°19' \rightarrow 56°$

bearing = N 56° W

Q2

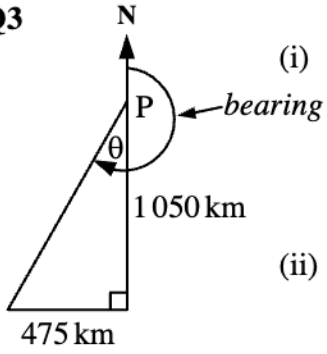


$\tan\theta = \frac{940}{1\,000}$

$\theta = 43°14'$

bearing = 133°14'

Q3



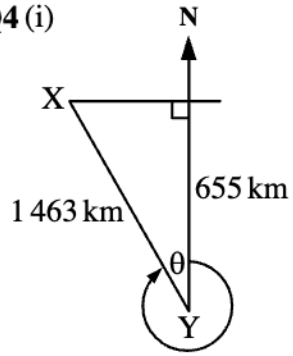
(i) $\tan\theta = \frac{475}{1\,050}$

$\theta = 24°20'$

bearing = 204°20'

(ii) **bearing = N24°20'E**

Q4 (i)

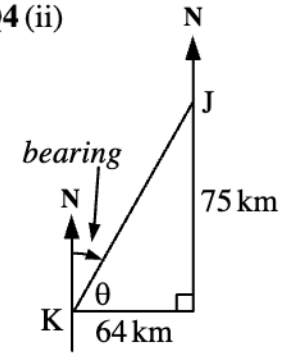


$\cos\theta = \frac{655}{1\,463}$

$\theta = 63°24' \rightarrow 63°$

bearing = 297°

Q4 (ii)

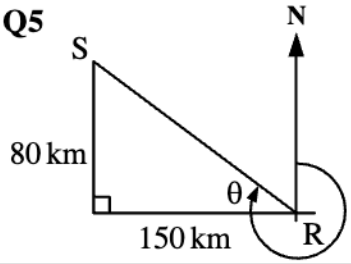


$\tan\theta = \frac{75}{64}$

$\theta = 49°31' \rightarrow 50°$

bearing = 040°

Q5



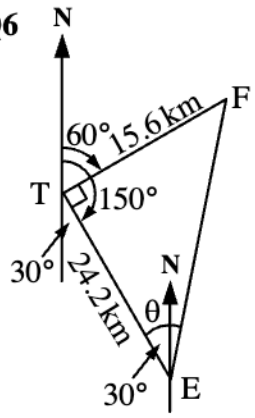
(i) $\tan\theta = \frac{80}{150}$

$\theta = 28°4' \rightarrow 28°$

bearing = 298°

(ii) **bearing = 118°**

Q6



(i) $\tan\theta = \frac{15.6}{24.2}$

$\theta = 32°48' \rightarrow 33°$

bearing = 003°

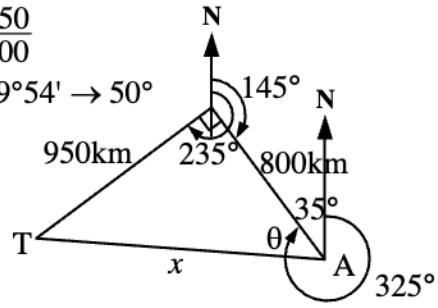
(ii) **183°**

(iii) $360° - 30° = \mathbf{330°}$

Q7

(i) $\tan\theta = \frac{950}{800}$

$\theta = 49°54' \rightarrow 50°$



bearing $= 360° - 35° - 50°$

$= \mathbf{275°}$

(ii) $x^2 = 950^2 + 800^2$ (Pythagoras)

$= 1\,542\,500$

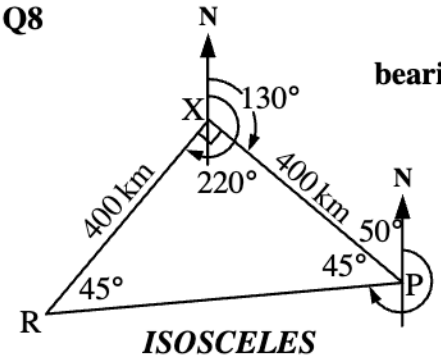
$x = 1\,241.974$ .....km

$\text{Time} = \frac{D}{S}$

$= \frac{1241.974....}{450}$

$= \mathbf{2h\ 46\,min}$

Q8



bearing = 265°

ISOSCELES TRIANGLE!