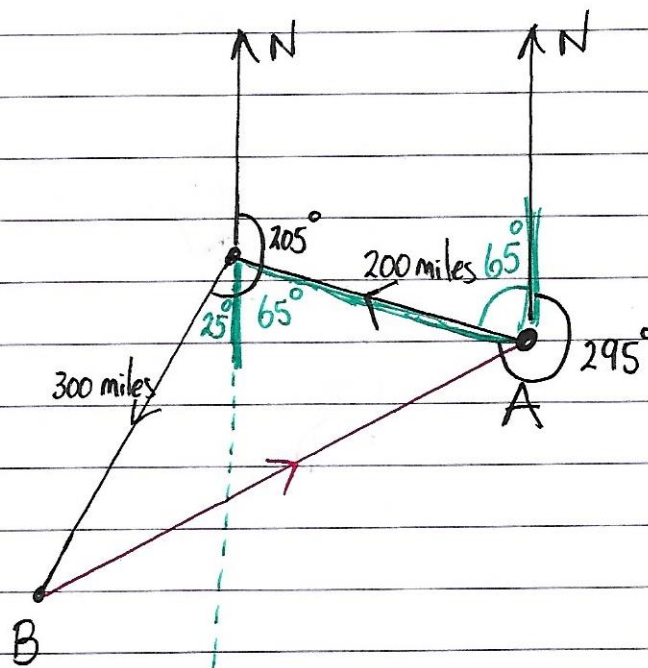


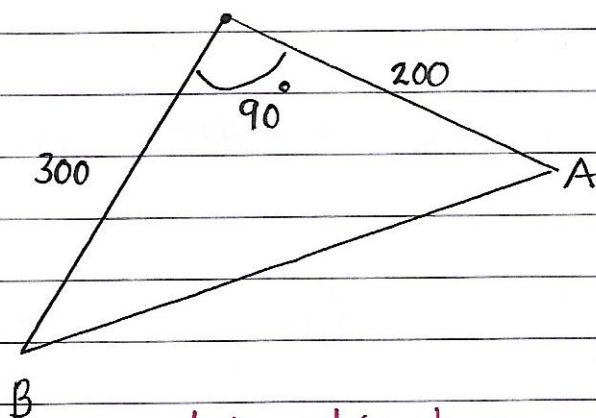
Correction

4)

a)



b)

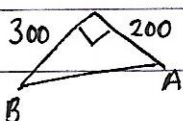


** • We have a 90° angle. ie we have a right-angle triangle.

- Pythag can be used
- SOH CAHTOA can be used

There is no need to use cosine rule to find AB, although it would work if you did use it!!

Use Pythag



$$h^2 = a^2 + b^2$$

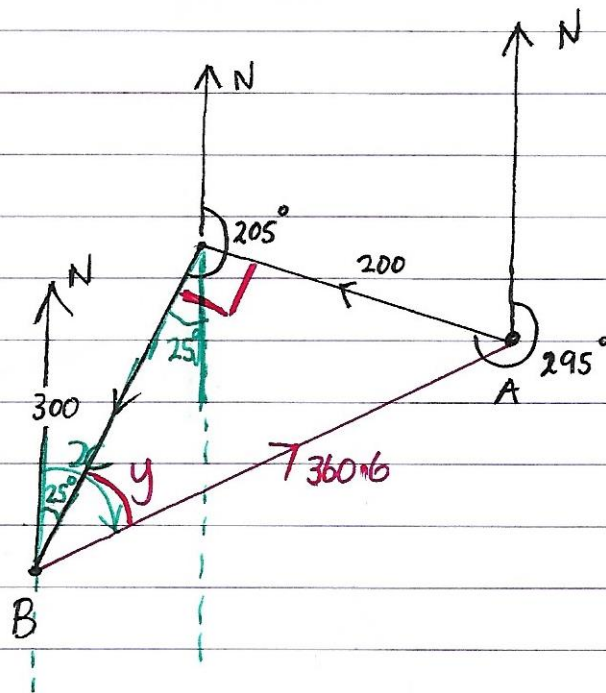
$$AB^2 = 200^2 + 300^2$$

$$AB^2 = 40000 + 90000$$

$$AB^2 = 130000$$

$$AB = 360.6 \text{ miles}$$

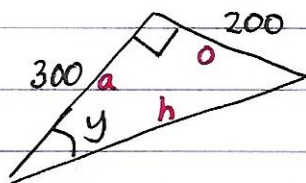
c)



Need to find angle x

Use $\frac{25}{3}$

Then find y using SOHCAHTOA in triangle



$\tan x = \frac{o}{a}$ General formula

$$\tan y = \frac{200}{300}$$

$$\tan y = \frac{2}{3}$$

$$y = 33.7^\circ \approx 34^\circ$$

∴ Return journey bearing is

$$34^\circ + 25^\circ = \underline{\underline{059^\circ}}$$