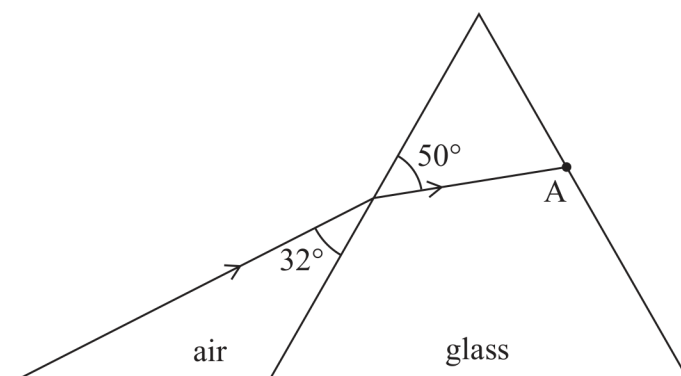


- 12 In an experiment to determine the refractive index of glass, a student directed a ray of light towards a glass prism.

The ray of light is shown before and after entering the prism.



- (a) (i) Determine the refractive index of the glass.

(3)

.....

.....

.....

.....

Refractive index of glass =

- (ii) Draw, on the diagram, the ray of light as it emerges from the prism at A.

No further calculations are required.

(1)

(b) A different prism is made of glass with a refractive index of 1.63

Calculate the speed of light in this glass.

(2)

Speed of light in glass =

(Total for Question 12 = 6 marks)