3 A ray of light approaches a boundary between air and glass, as shown.
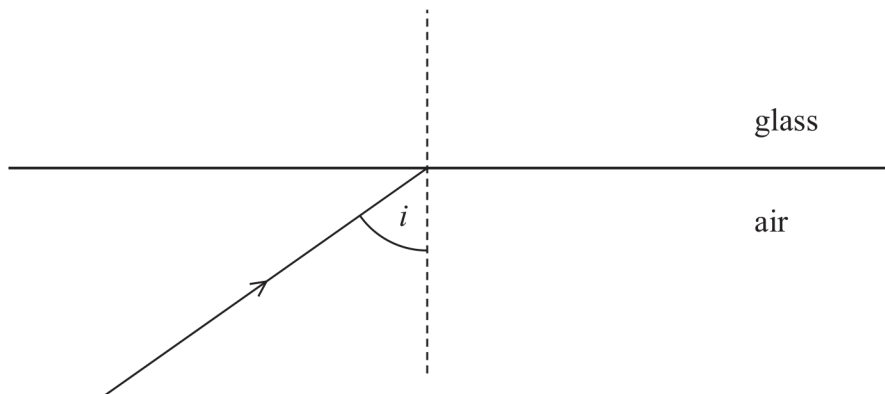
The angle of incidence is i.

Which of the following statements about total internal reflection (TIR) is correct for the ray of light at this boundary?

☒ **A** TIR cannot take place.

☒ **B** TIR takes place if i is equal to the critical angle.

☒ **C** TIR takes place if i is greater than the critical angle.

☒ **D** TIR takes place if i is less than the critical angle.

(Total for Question 3 = 1 mark)