





























(b) When flying, the pressure inside the cabin of an aircraft is kept at 70 kPa.

The aircraft window has an area of 810 cm<sup>2</sup>.

Use data from **Figure 1** to calculate the resultant force acting on an aircraft window when the aircraft is flying at an altitude of 12 km.

Give your answer to two significant figures

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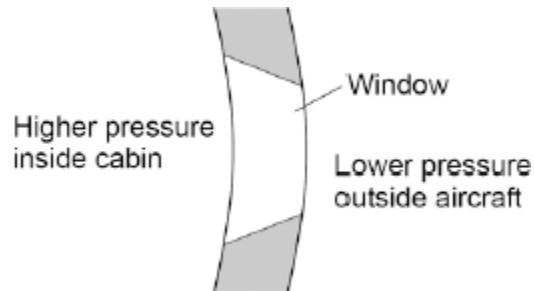
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Resultant force = \_\_\_\_\_ N

(5)

(c) **Figure 2** shows the cross-section of one type of aircraft window.

**Figure 2**



Explain why the window has been designed to have this shape.

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(2)

(Total 10 marks)