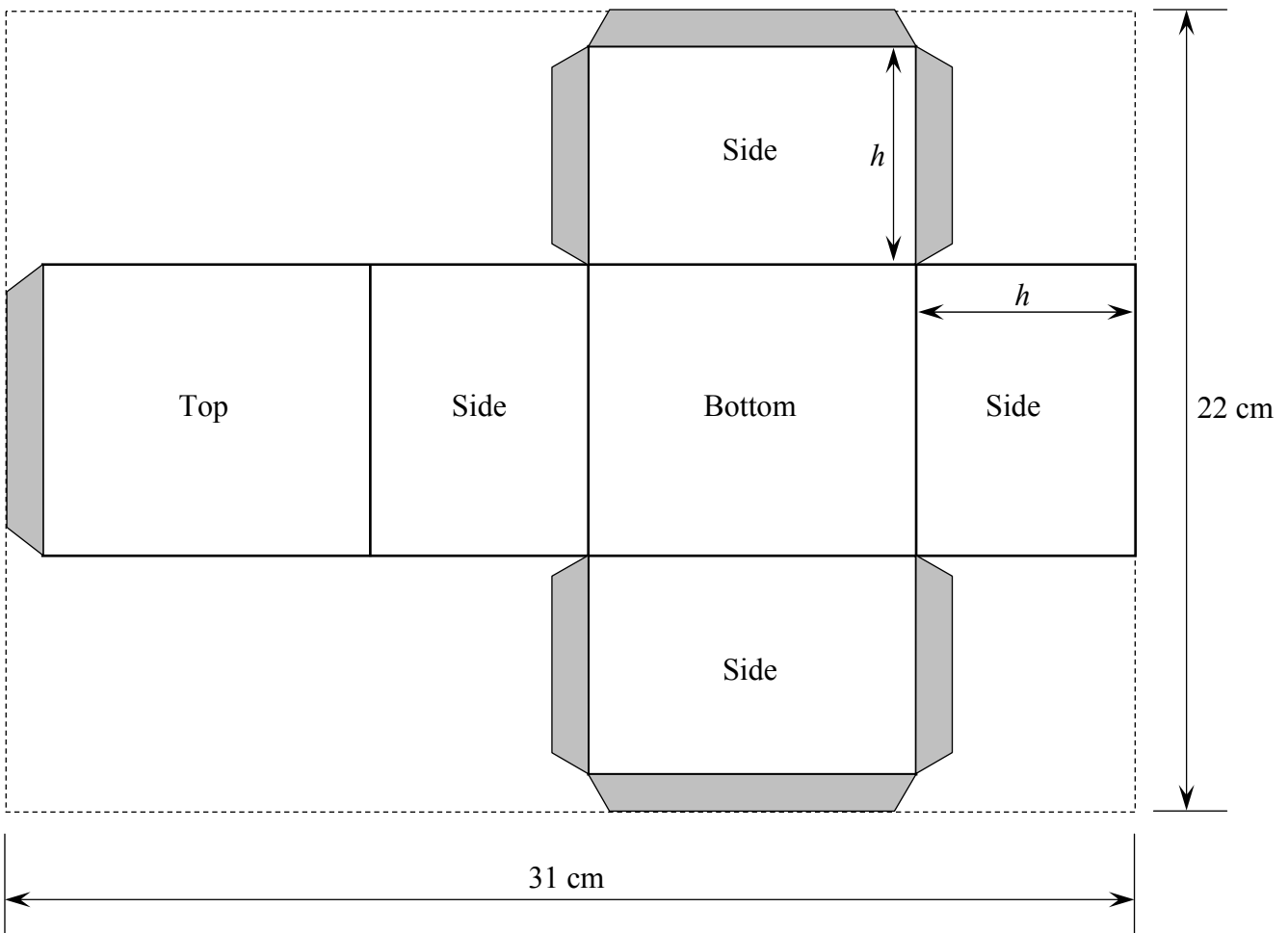


Answer **all three** questions from this section.

Question 7**(50 marks)**

A company has to design a rectangular box for a new range of jellybeans. The box is to be assembled from a single piece of cardboard, cut from a rectangular sheet measuring 31 cm by 22 cm. The box is to have a capacity (volume) of 500 cm^3 .

The net for the box is shown below. The company is going to use the full length and width of the rectangular piece of cardboard. The shaded areas are flaps of width 1 cm which are needed for assembly. The height of the box is h cm, as shown on the diagram.



- (a) Write the dimensions of the box, in centimetres, in terms of h .

height =	h	cm
length =	_____	cm
width =	_____	cm

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