

Design and Technology  
COMPONENT 1: Papers and Boards

Monday 19 June 2023 - Morning

Diagram Booklet

In the boxes below, write your name, centre number and candidate number.

Surname					
Other names					
Centre Number					
Candidate Number					

**INSTRUCTIONS**

There may be spare copies of some diagrams in case you need them.

**THIS DIAGRAM BOOKLET *MUST* BE RETURNED WITH THE  
QUESTION PAPER AT THE END OF THE EXAMINATION.**

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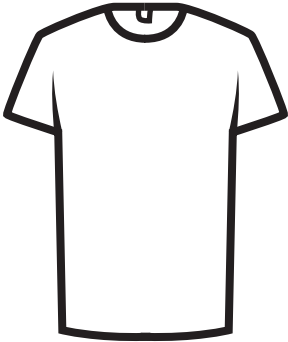
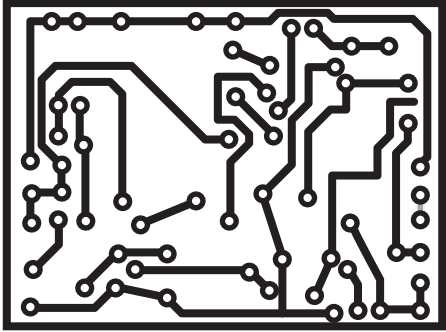
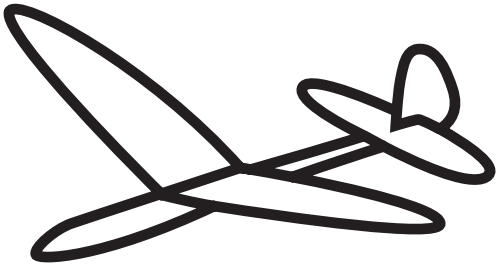

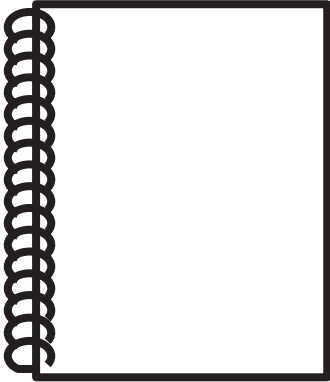
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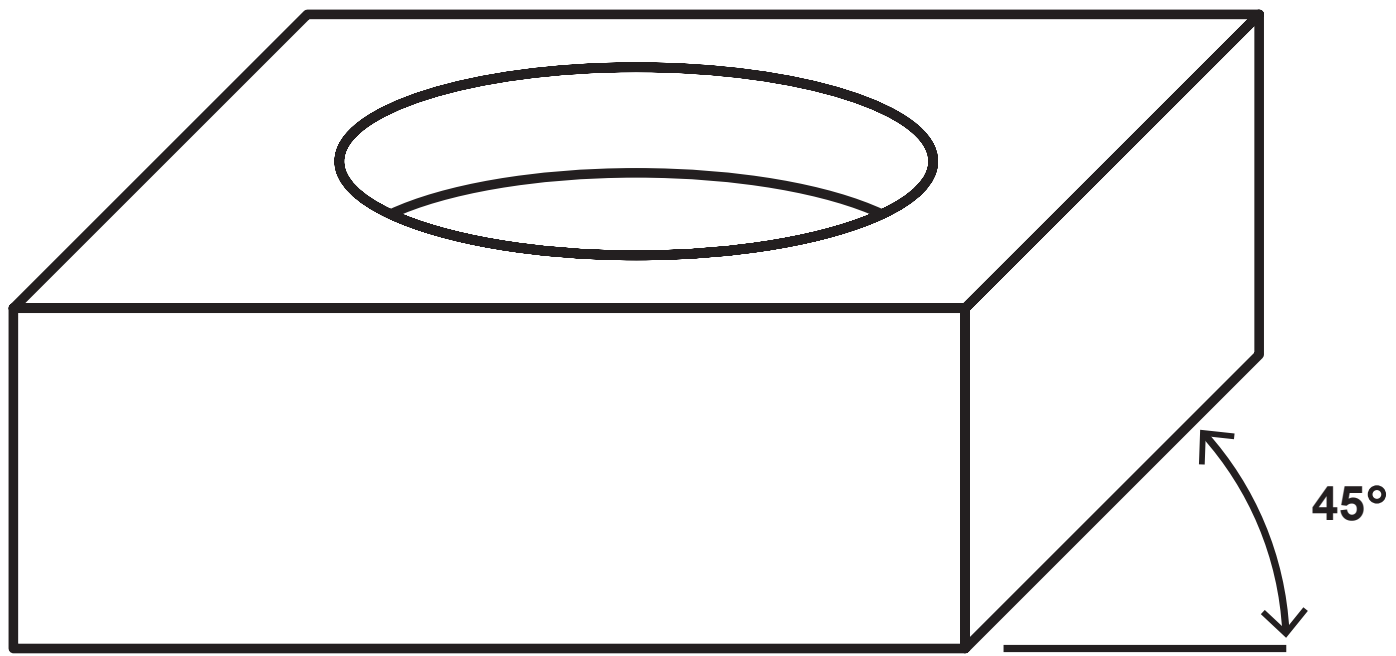
Question 1(a)

FIGURE 1

Picture of product	Material and product	Property
	Cotton T-shirt	Soft
	Polyester resin printed circuit board (PCB)	(i) _____
	Balsa wood toy plane	(ii) _____
	Stainless steel kitchen scissors	(iii) _____
	Solid white board hardback book cover	(iv) _____

## Question 2

FIGURE 2



## Question 2(c)

All dimensions in mm

Ø – diameter

FIGURE 3



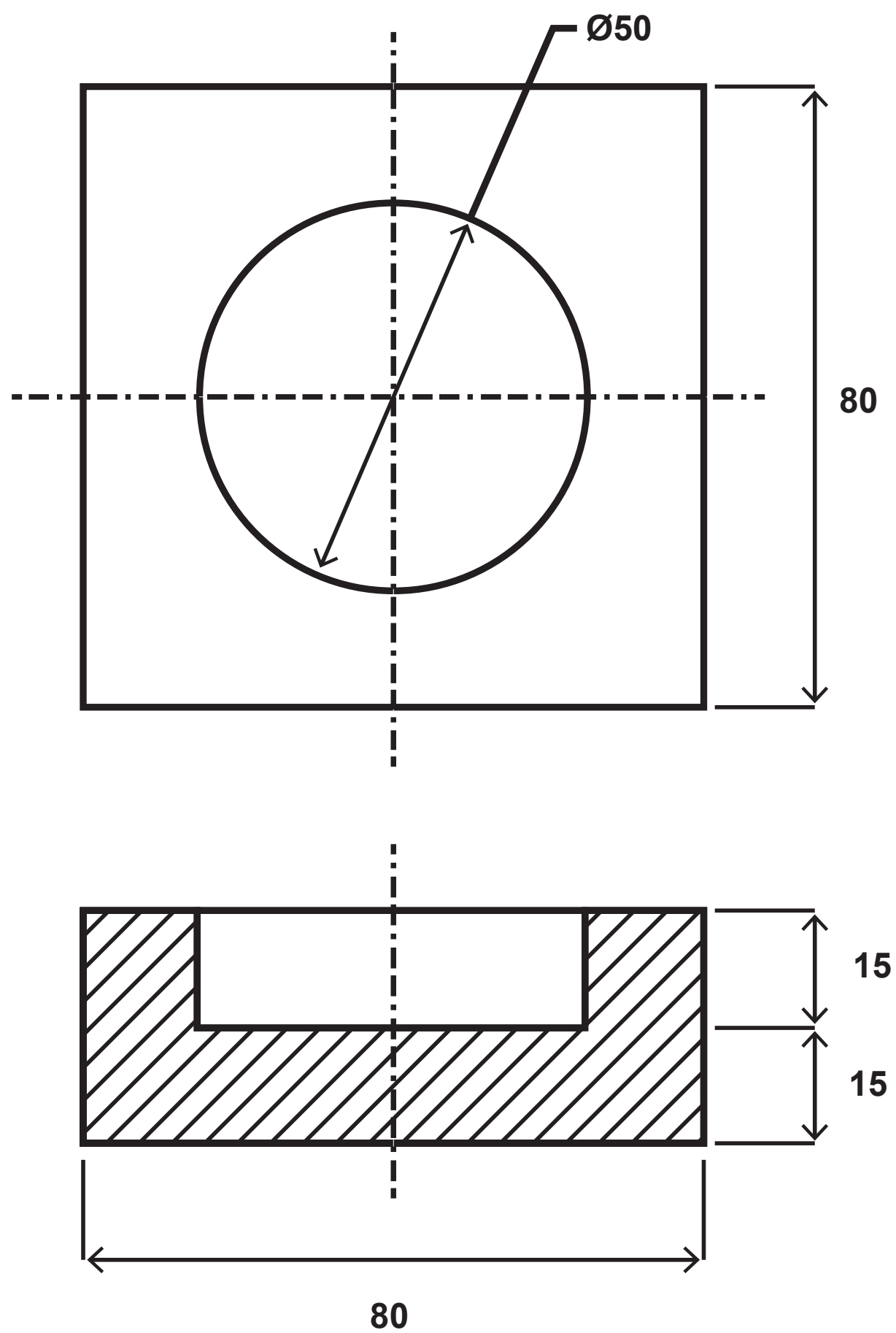
## Question 2(d)

All dimensions in mm

Volume of cylinder =  $\pi \times r^2 \times h$

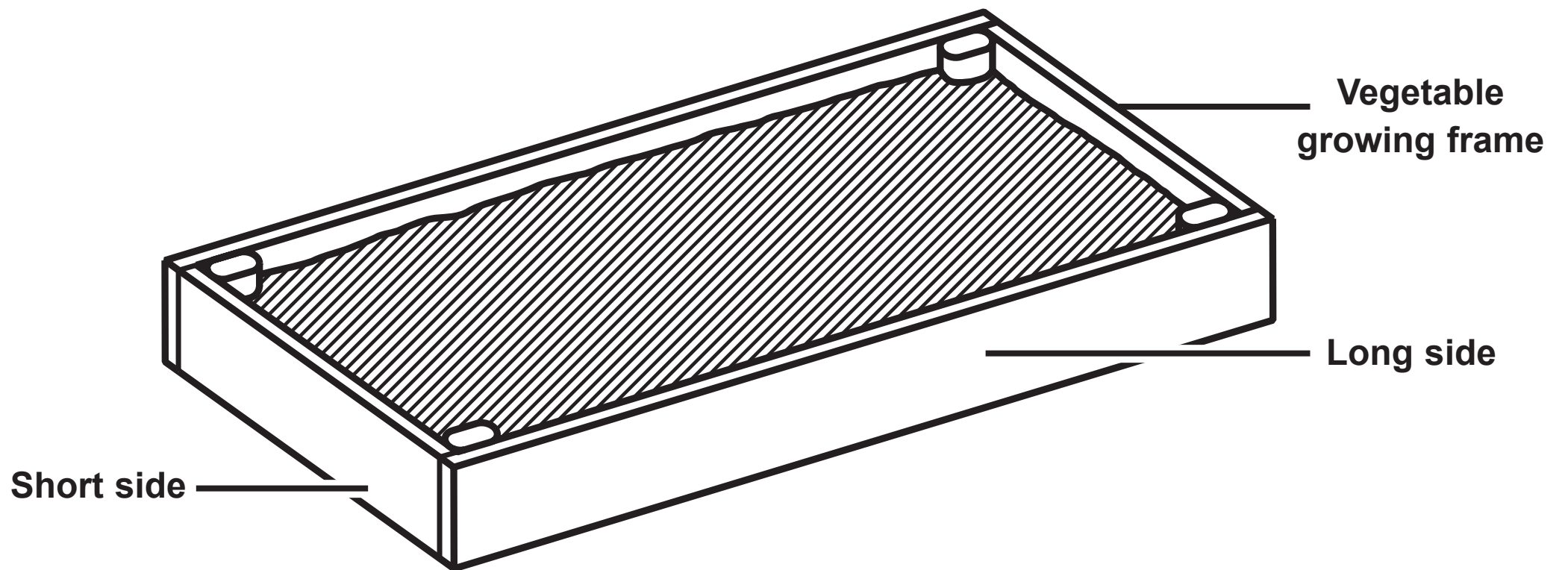
Use  $\pi = 3.142$

FIGURE 4

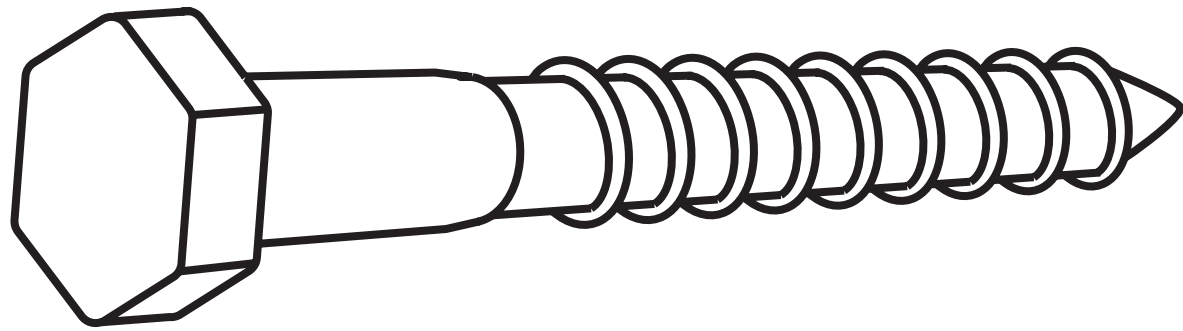


## Question 3

FIGURE 5





**Question 3(d)****FIGURE 6**

## Question 4

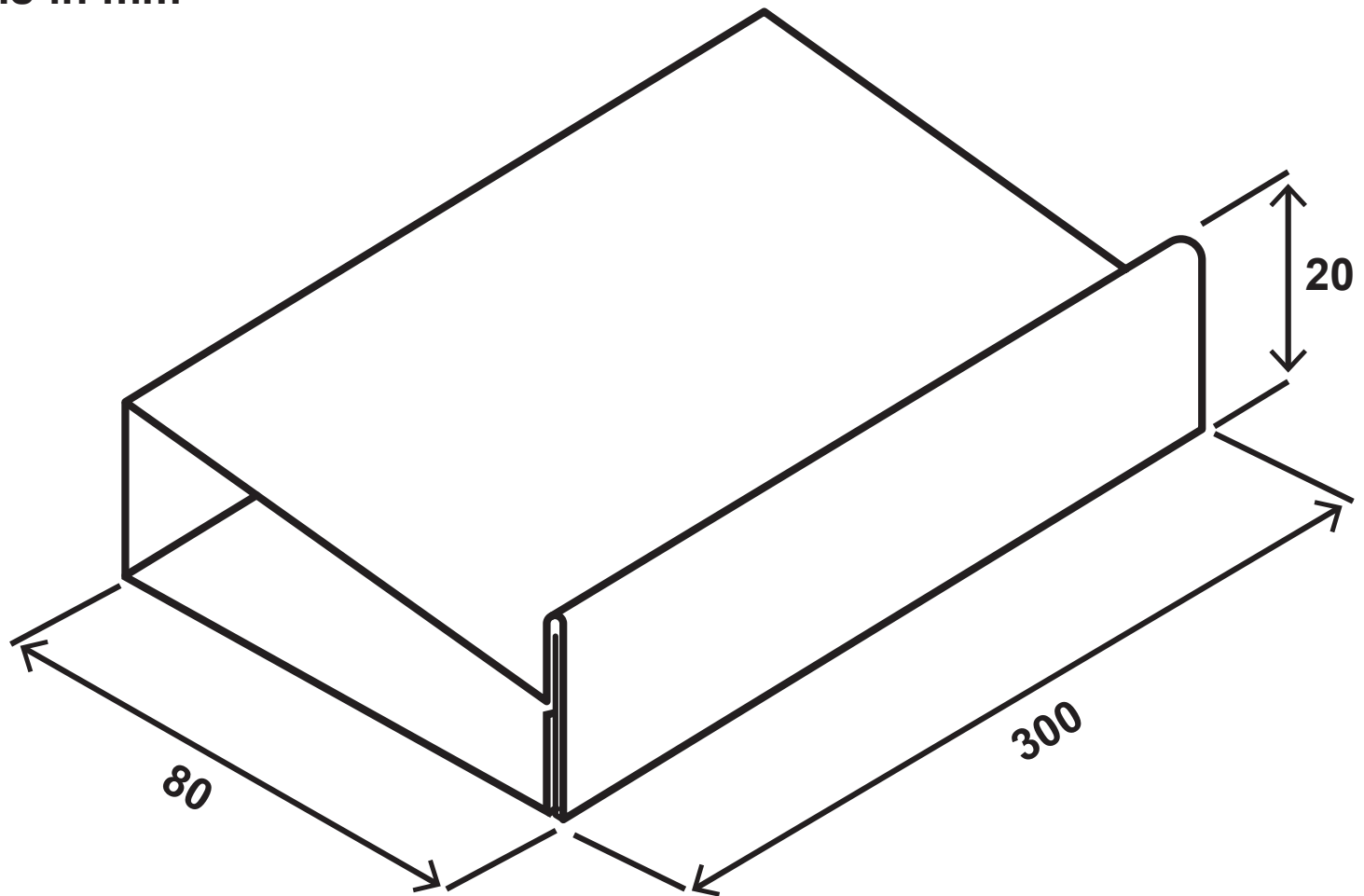
FIGURE 7



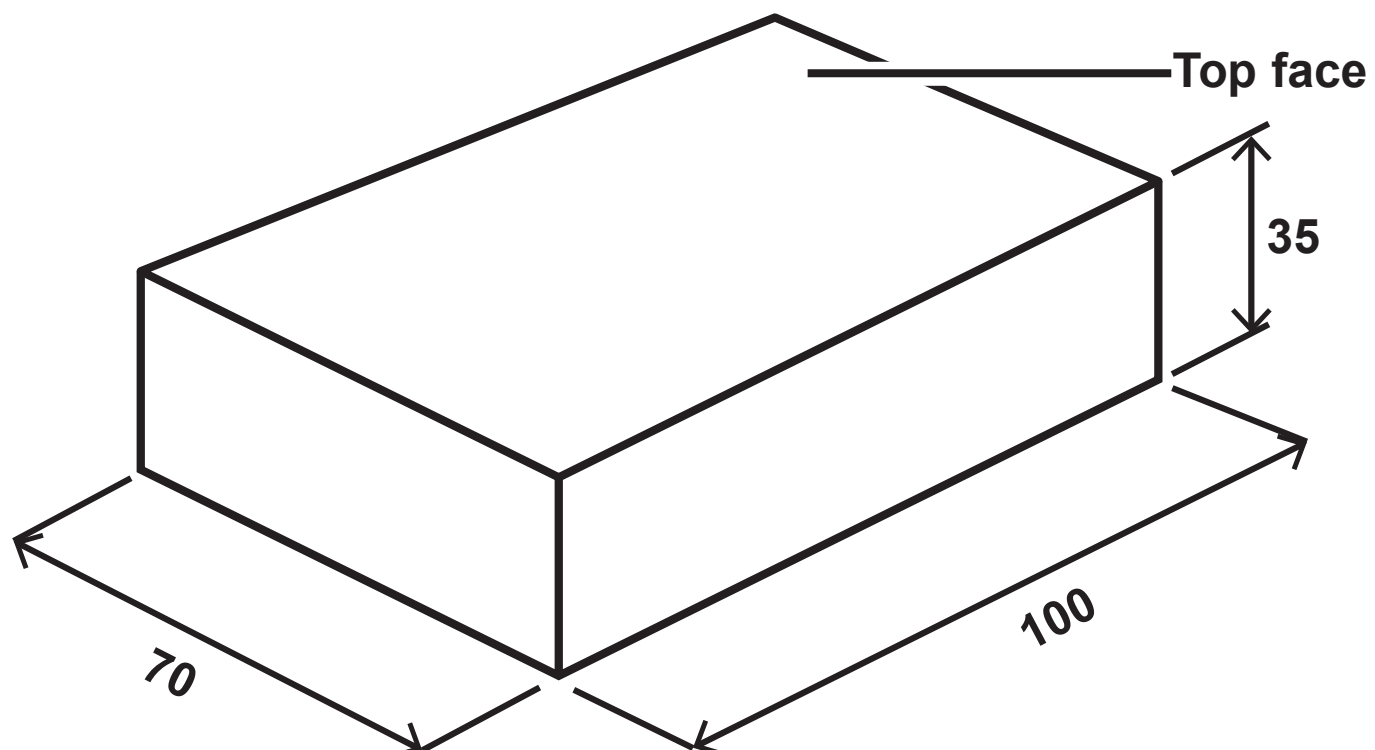
## Question 5

FIGURE 8

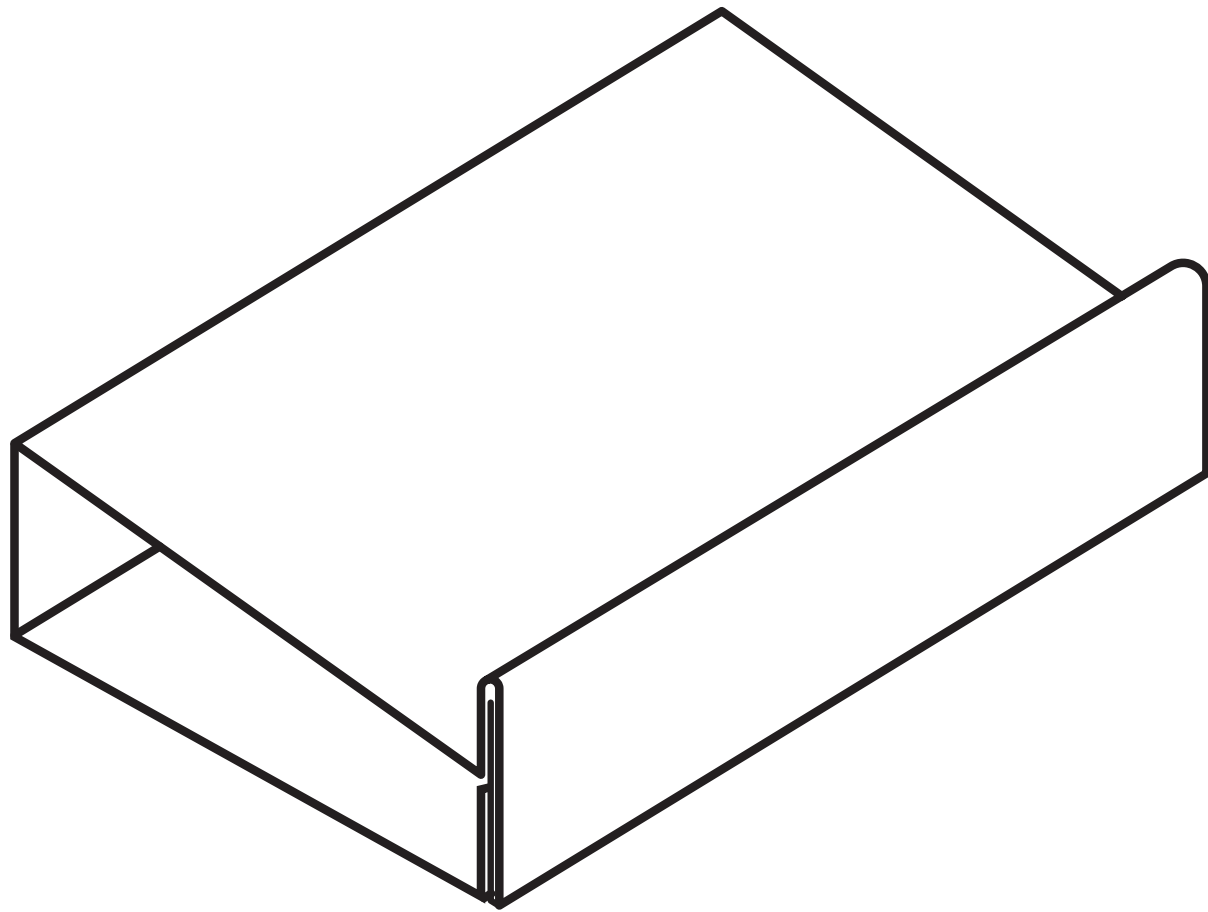
All dimensions in mm



Additional information – dimensions of box of chocolates

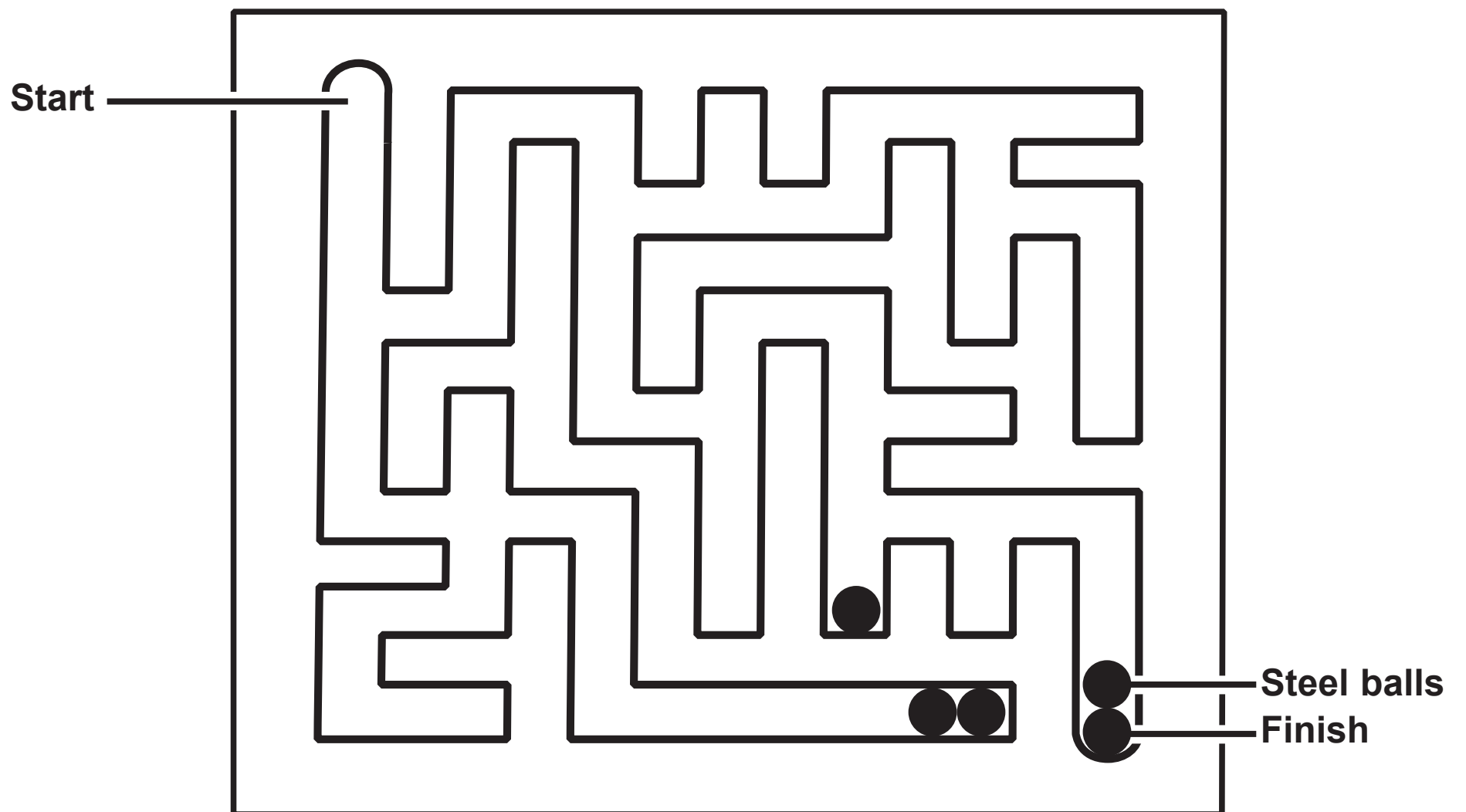


## Question 5(a)



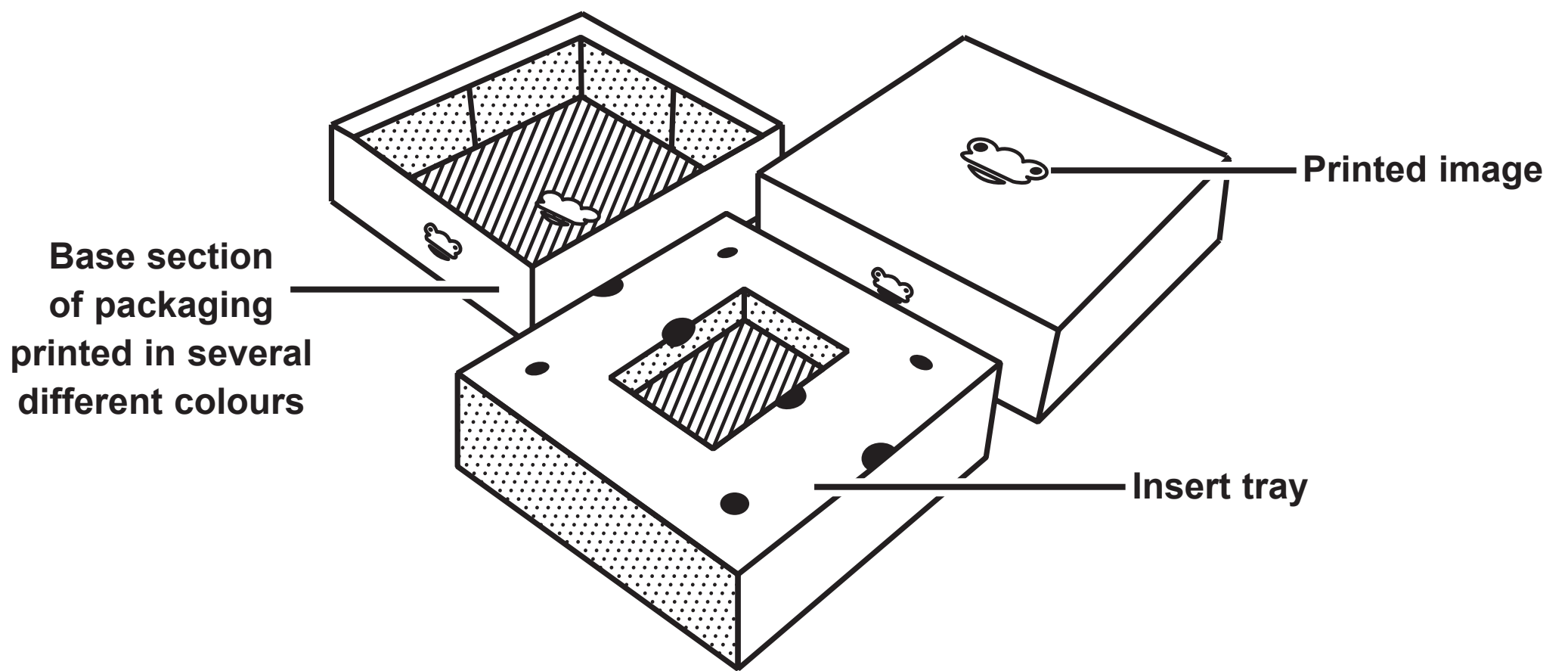
## Question 5(b)

FIGURE 9



## Question 6(a)

FIGURE 10



Question 6(b)

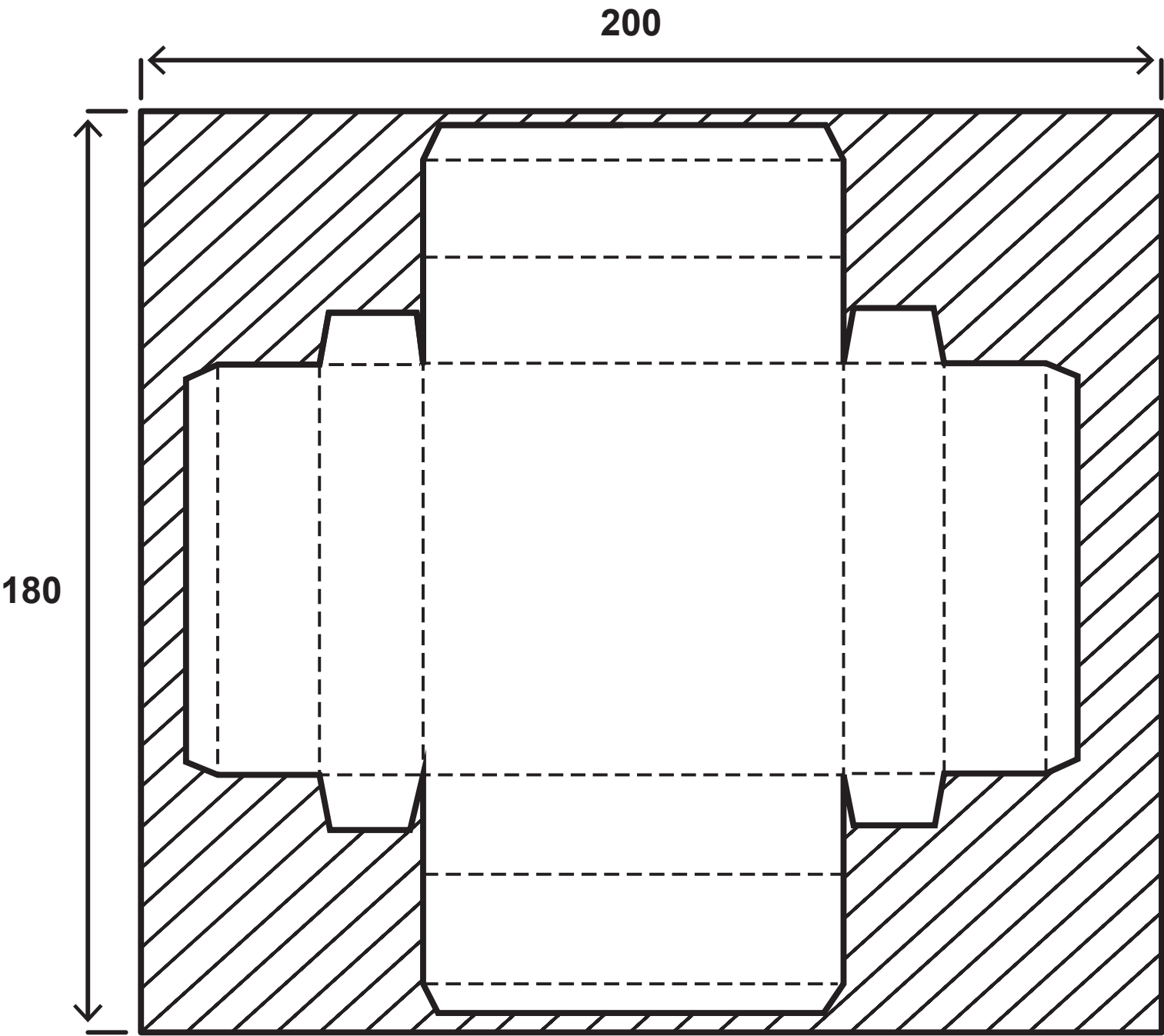
FIGURE 11

All dimensions in mm

Key

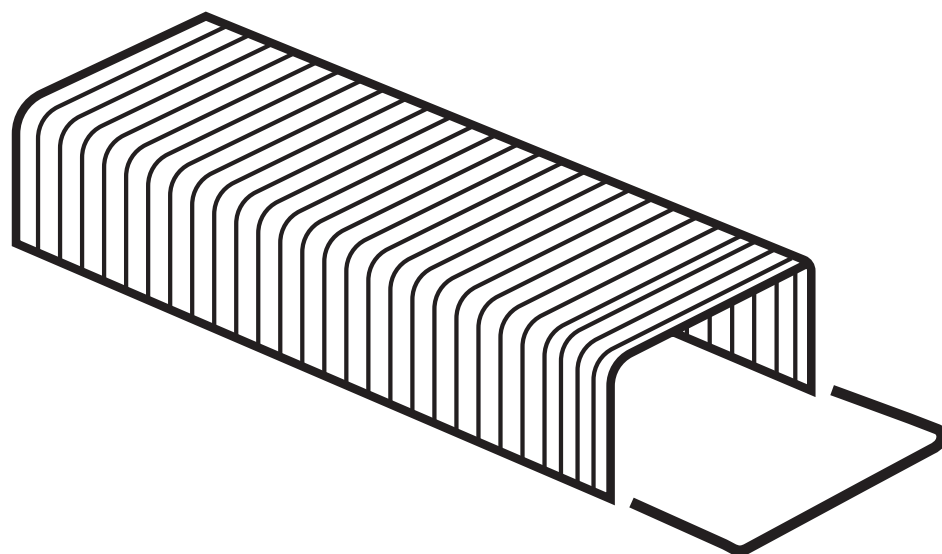
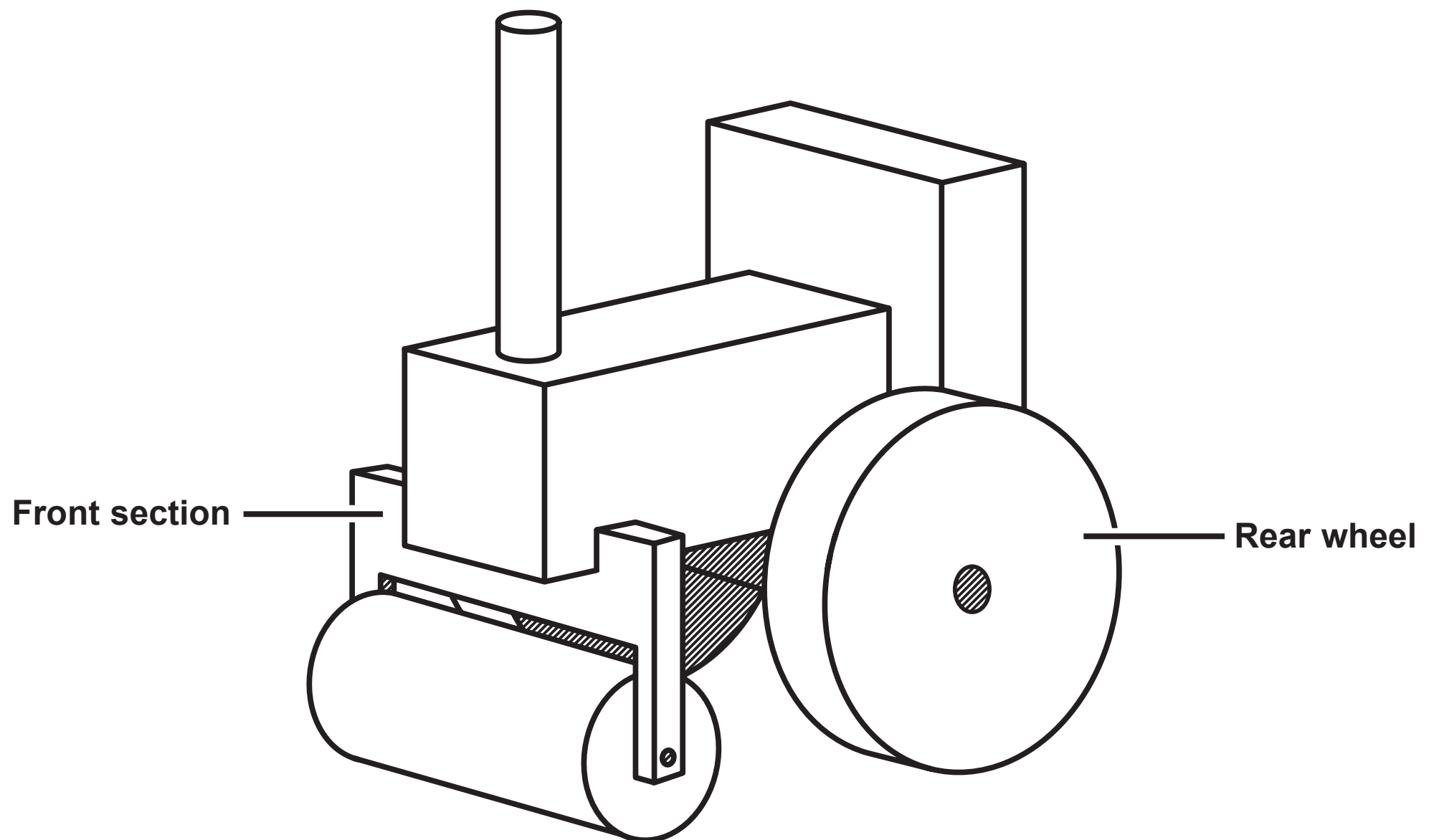
———— Cut line

----- Fold line



## Question 7

FIGURE 12

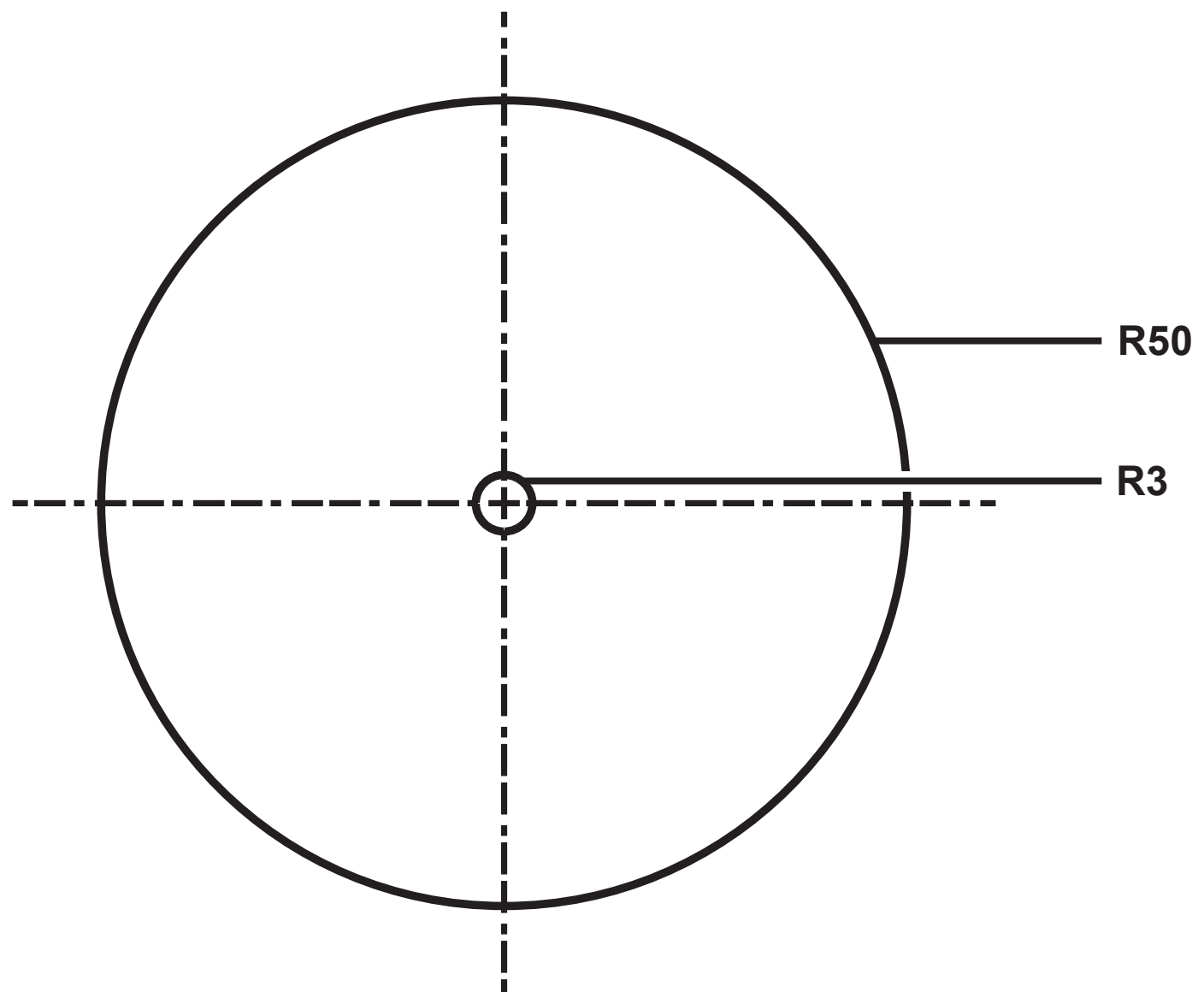




## Question 7

FIGURE 13

All dimensions in mm

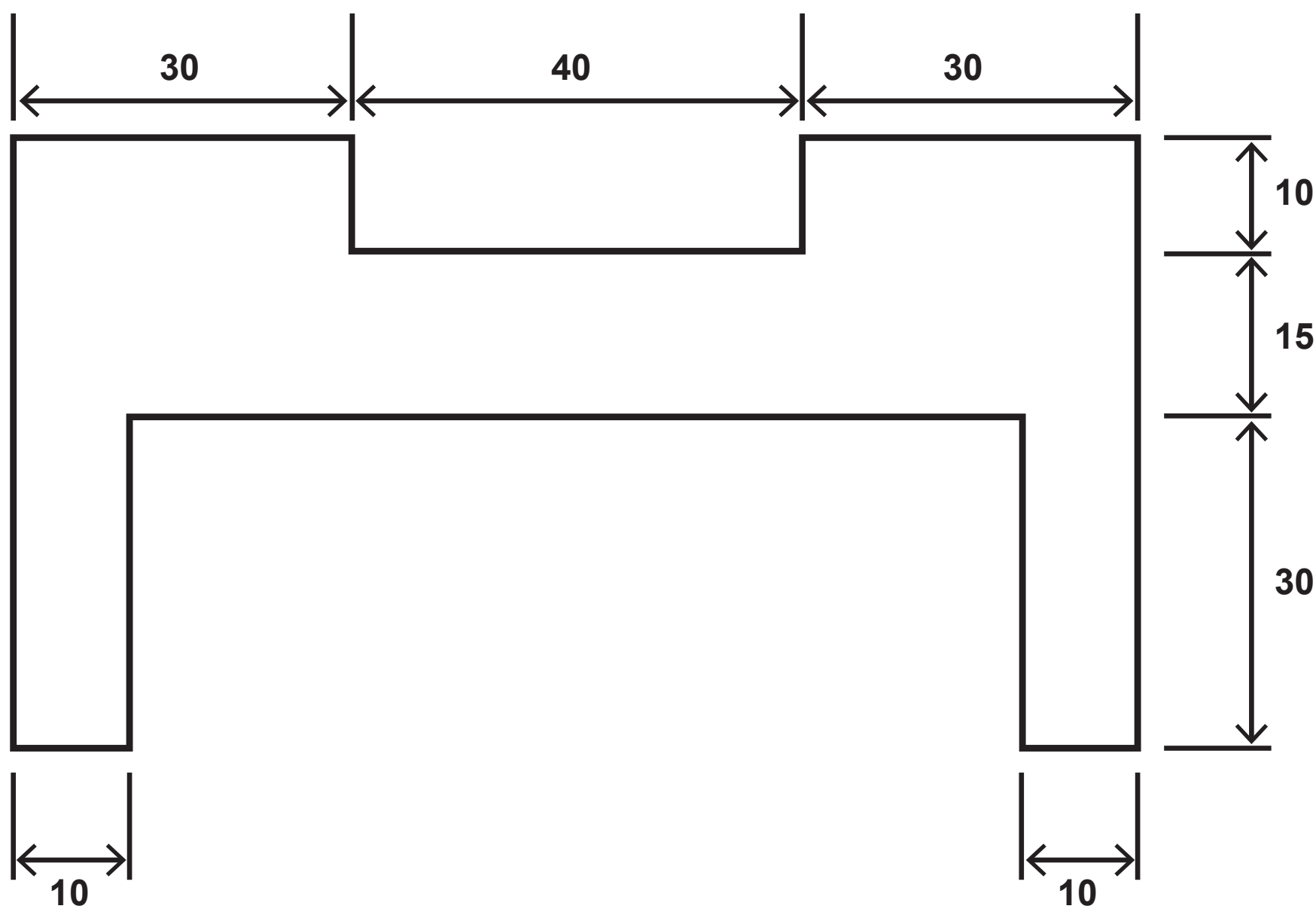


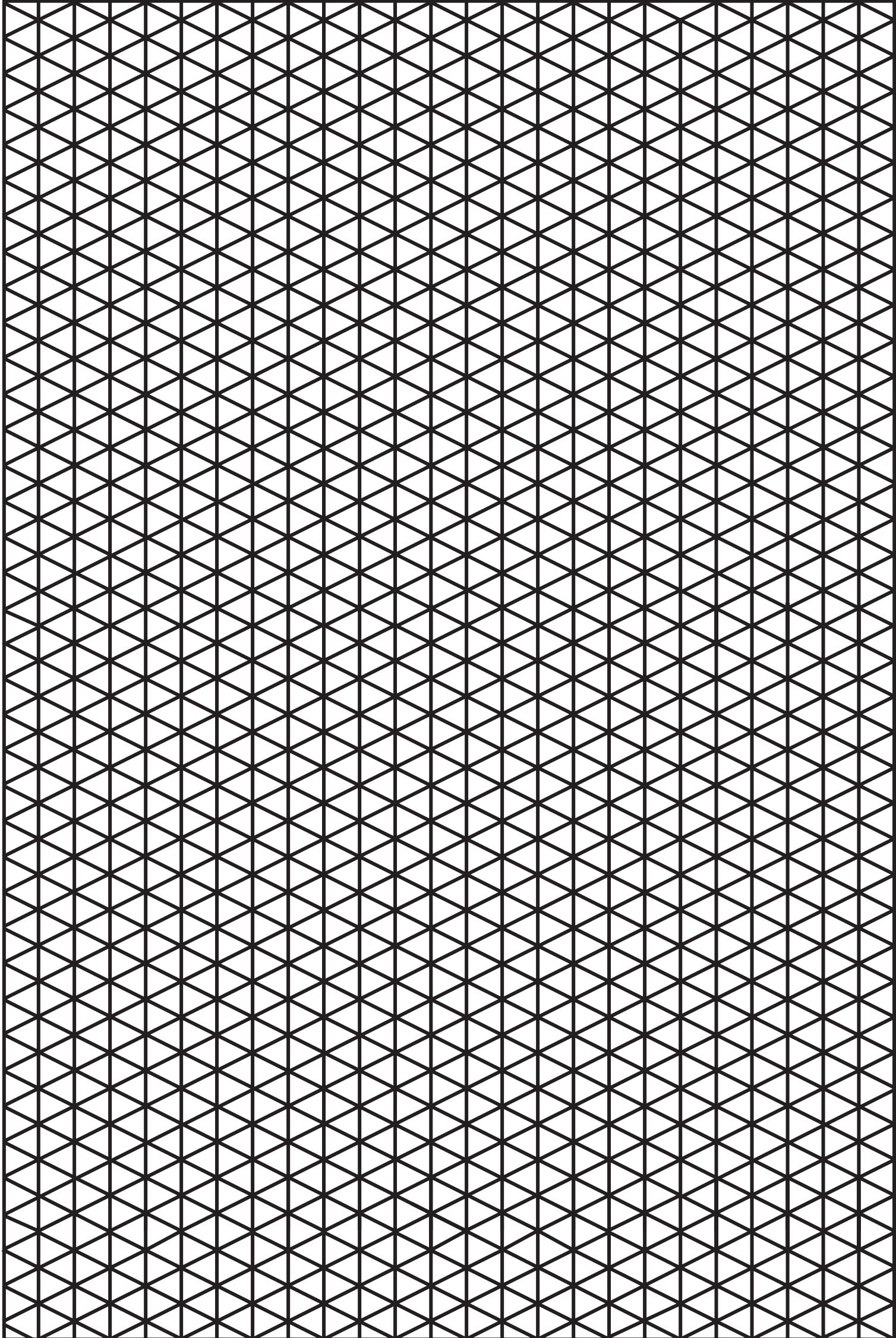
Question 7(c)

FIGURE 14

All dimensions in mm

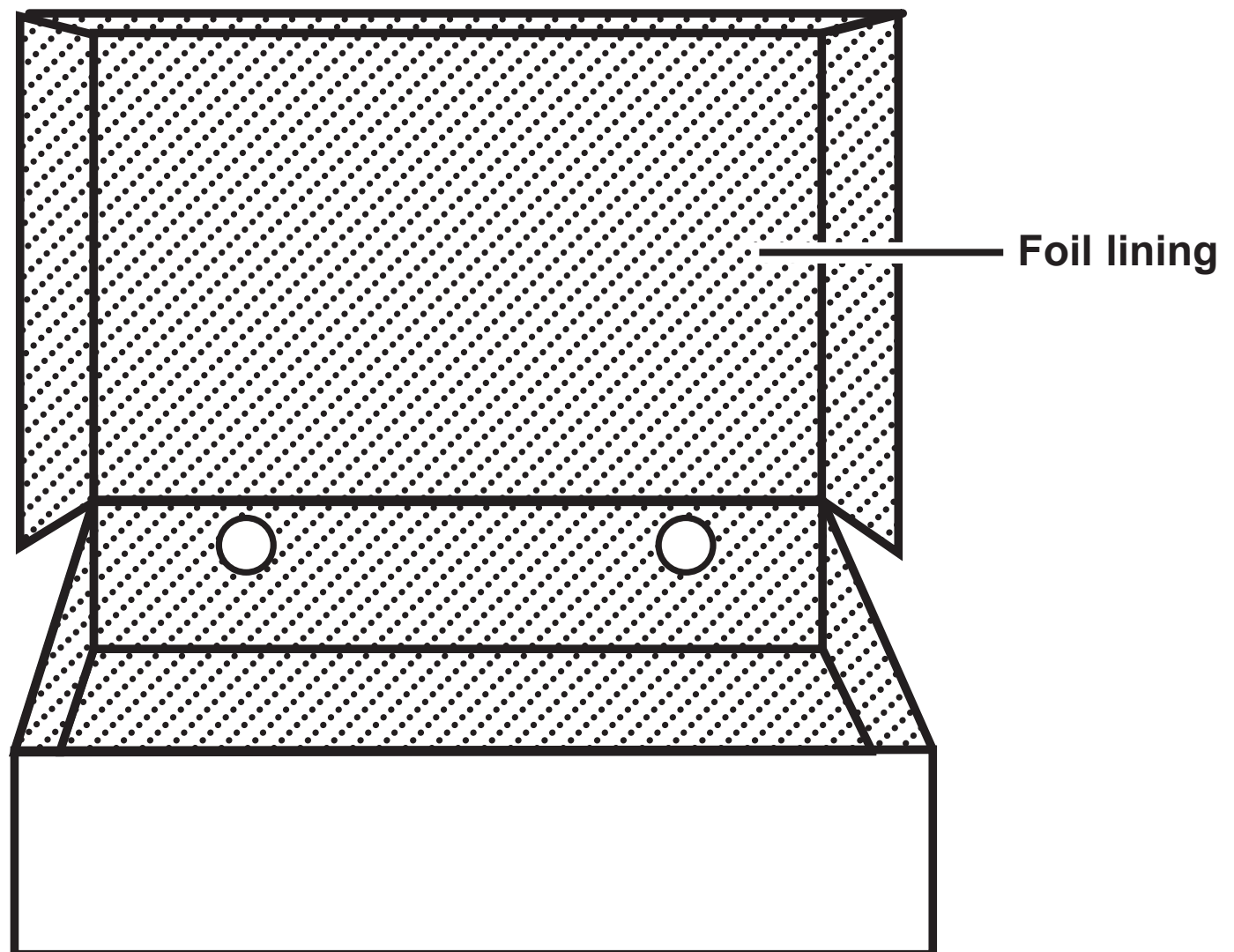
Diagram not to scale



**Question 7(c)****5mm isometric grid**

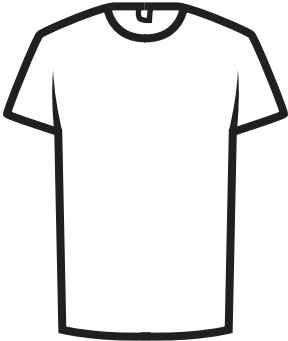
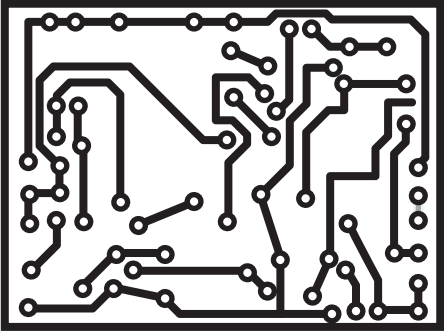


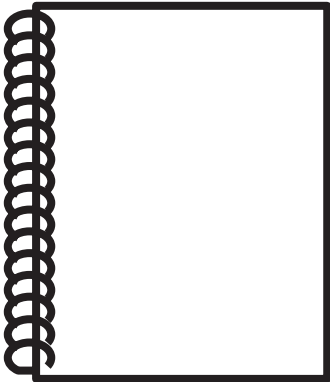
## Question 8

FIGURE 15

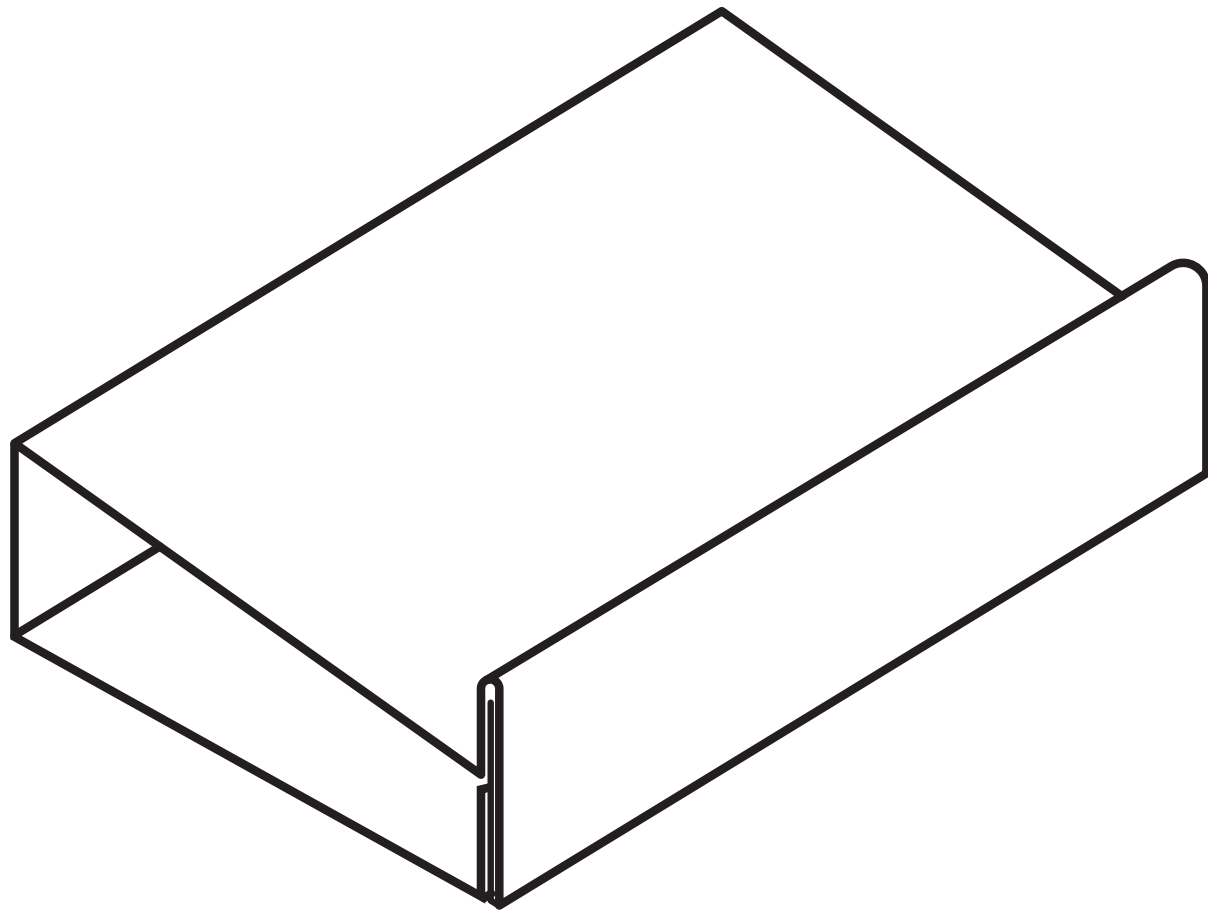


Question 1(a)

FIGURE 1

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## Question 5(a)



**Question 7(c)****5mm isometric grid**