

Design and Technology
COMPONENT 1: Systems

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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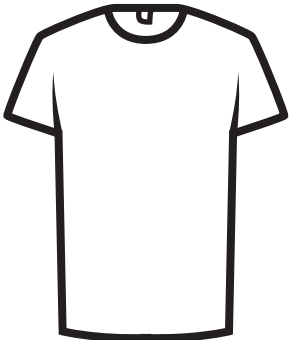
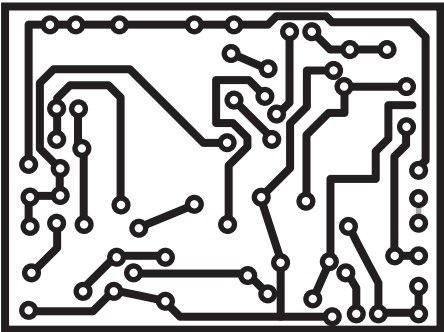
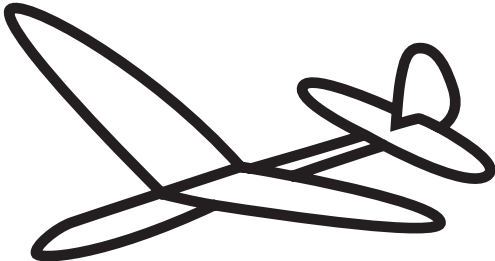

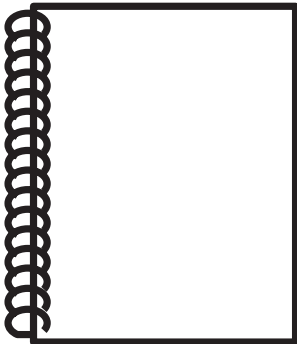
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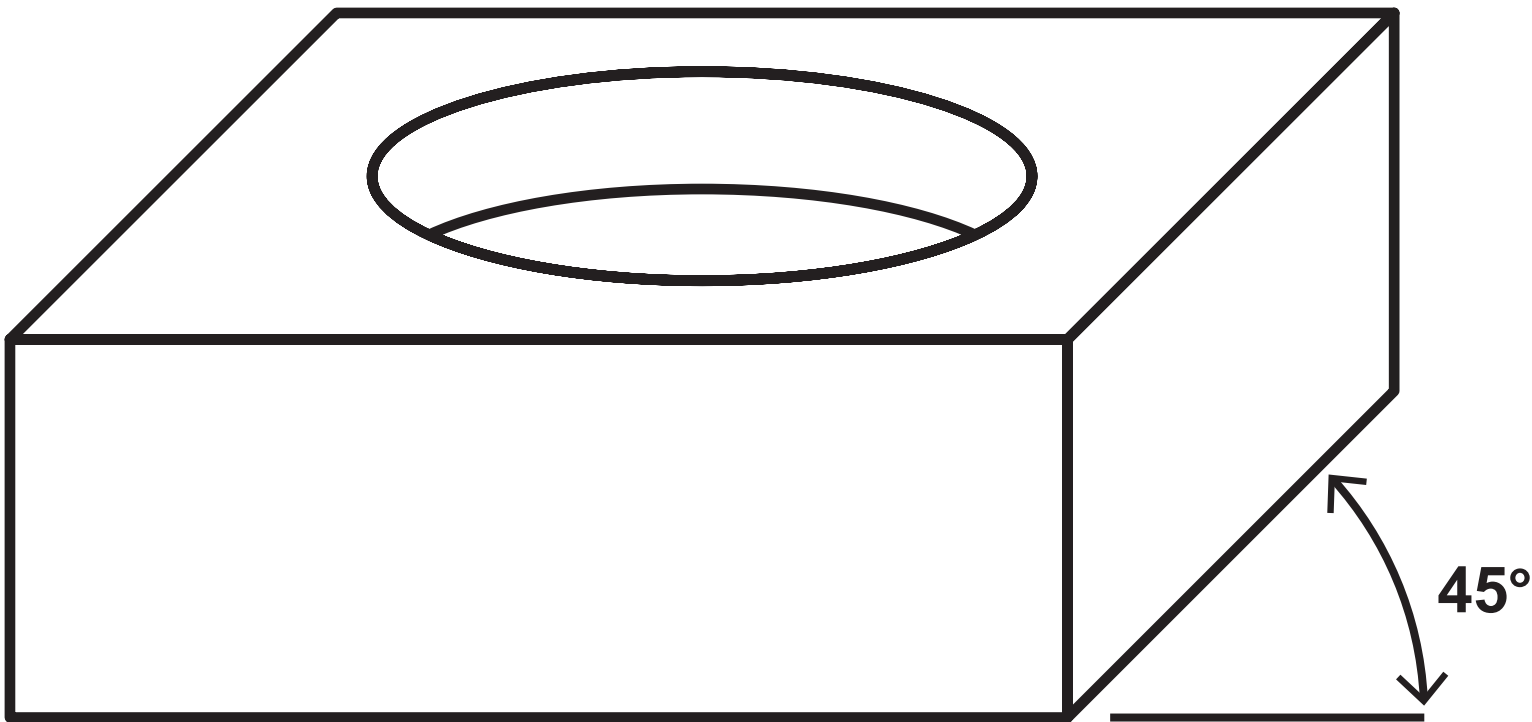
Question 1(a)

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

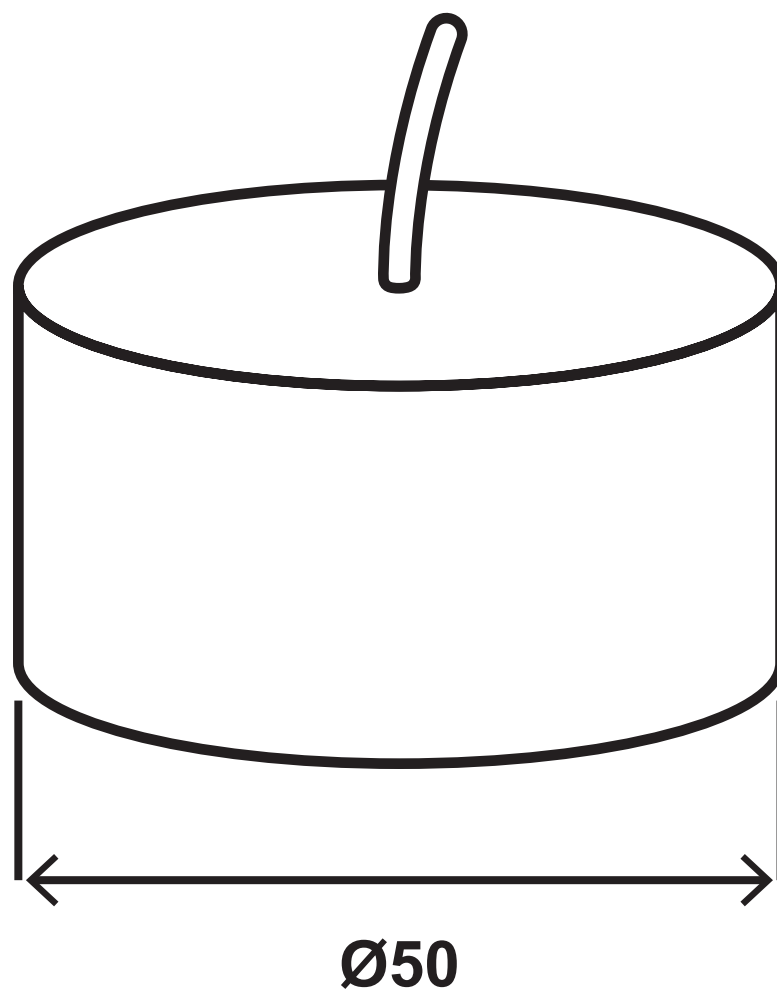


Question 2(c)

FIGURE 3

All dimensions in mm

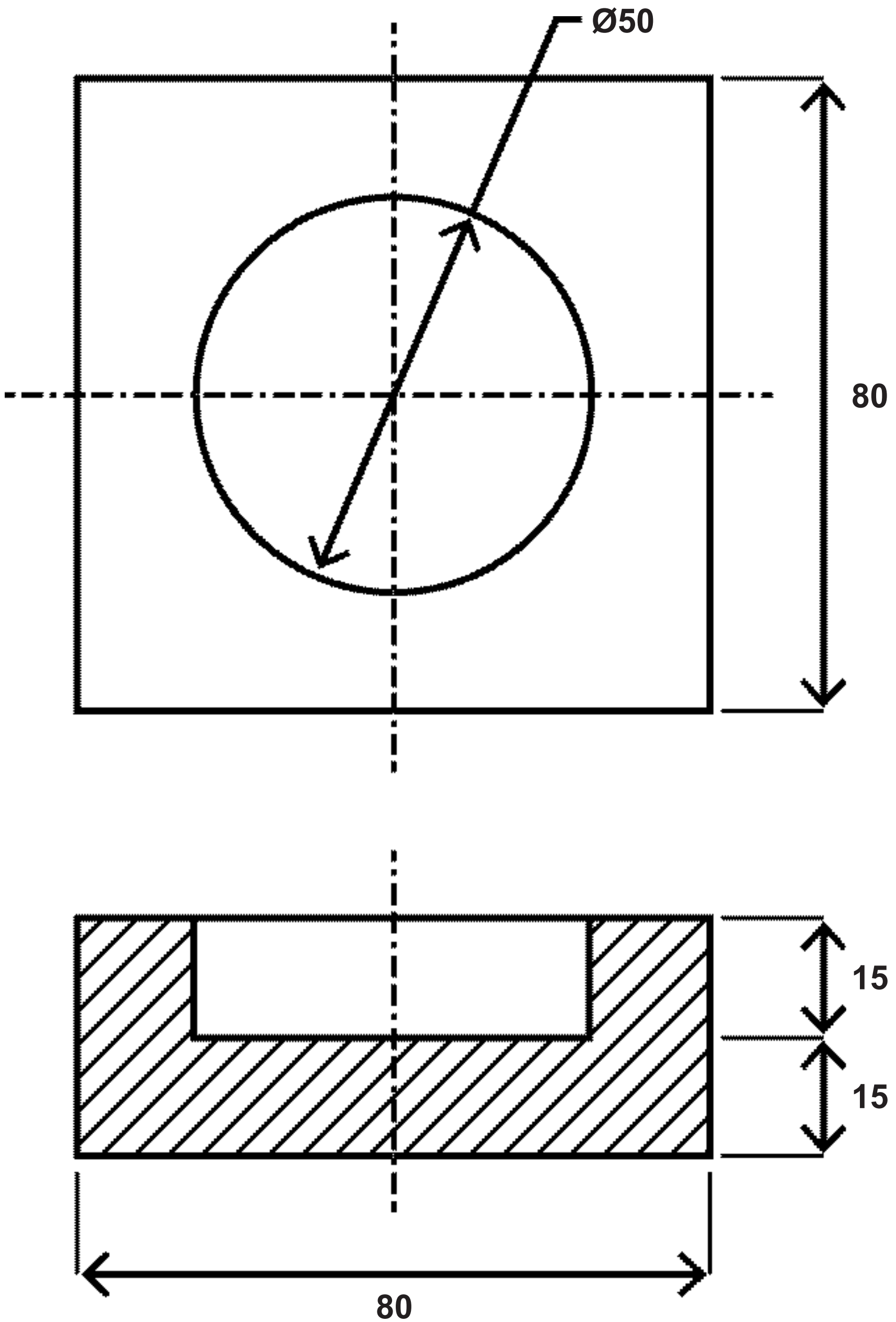
Ø – diameter



Question 2(d)

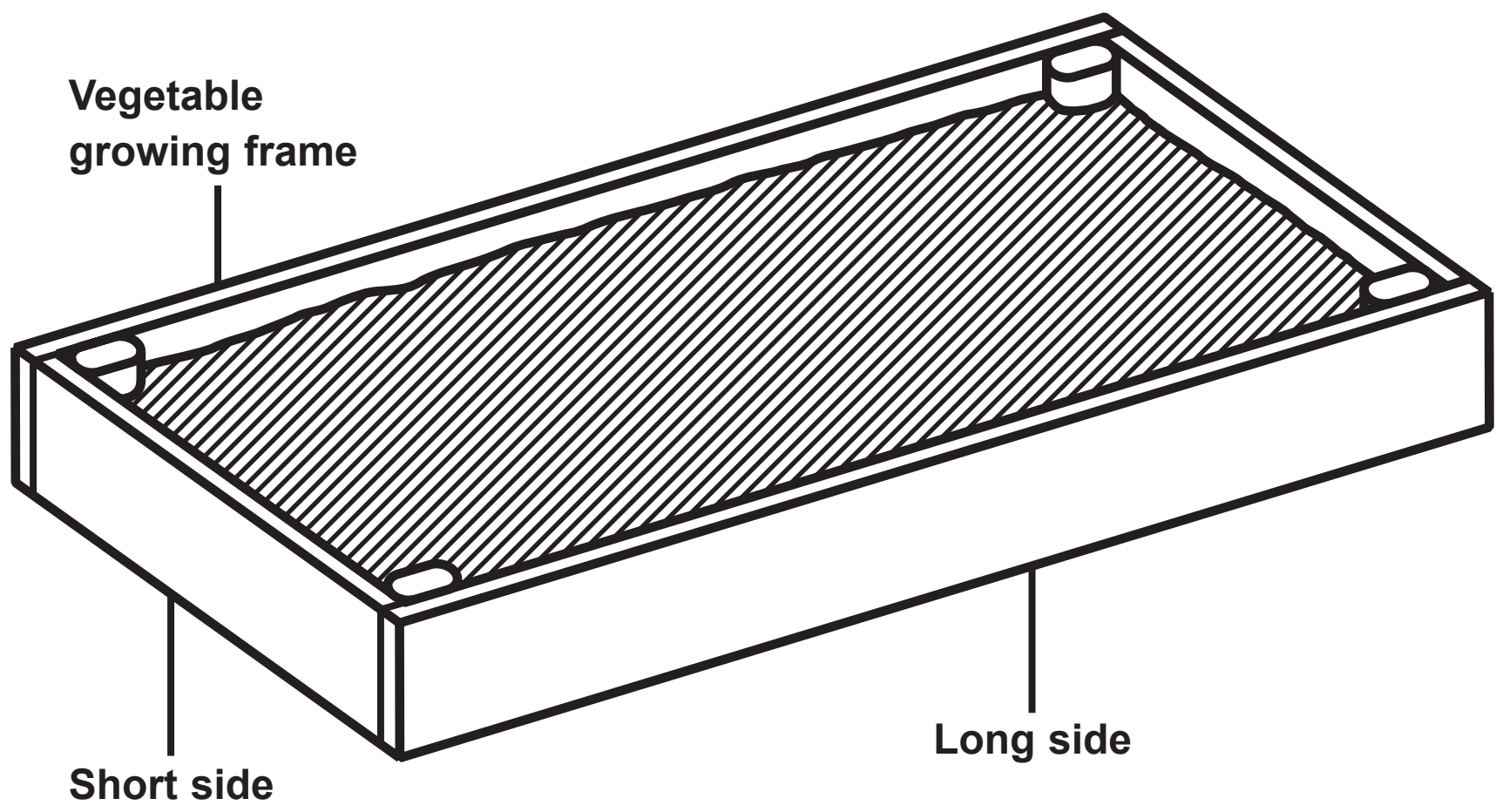
FIGURE 4

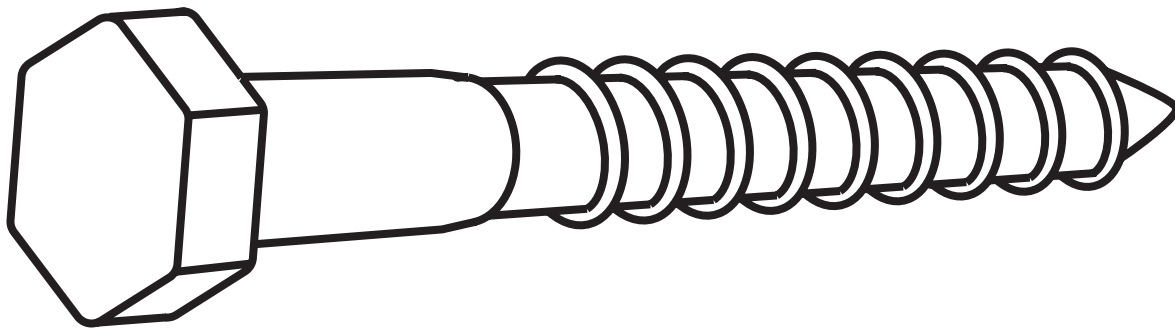
All dimensions in mm

Volume of cylinder = $\pi \times r^2 \times h$ Use $\pi = 3.142$ 

Question 3

FIGURE 5



Question 3(d)**FIGURE 6**

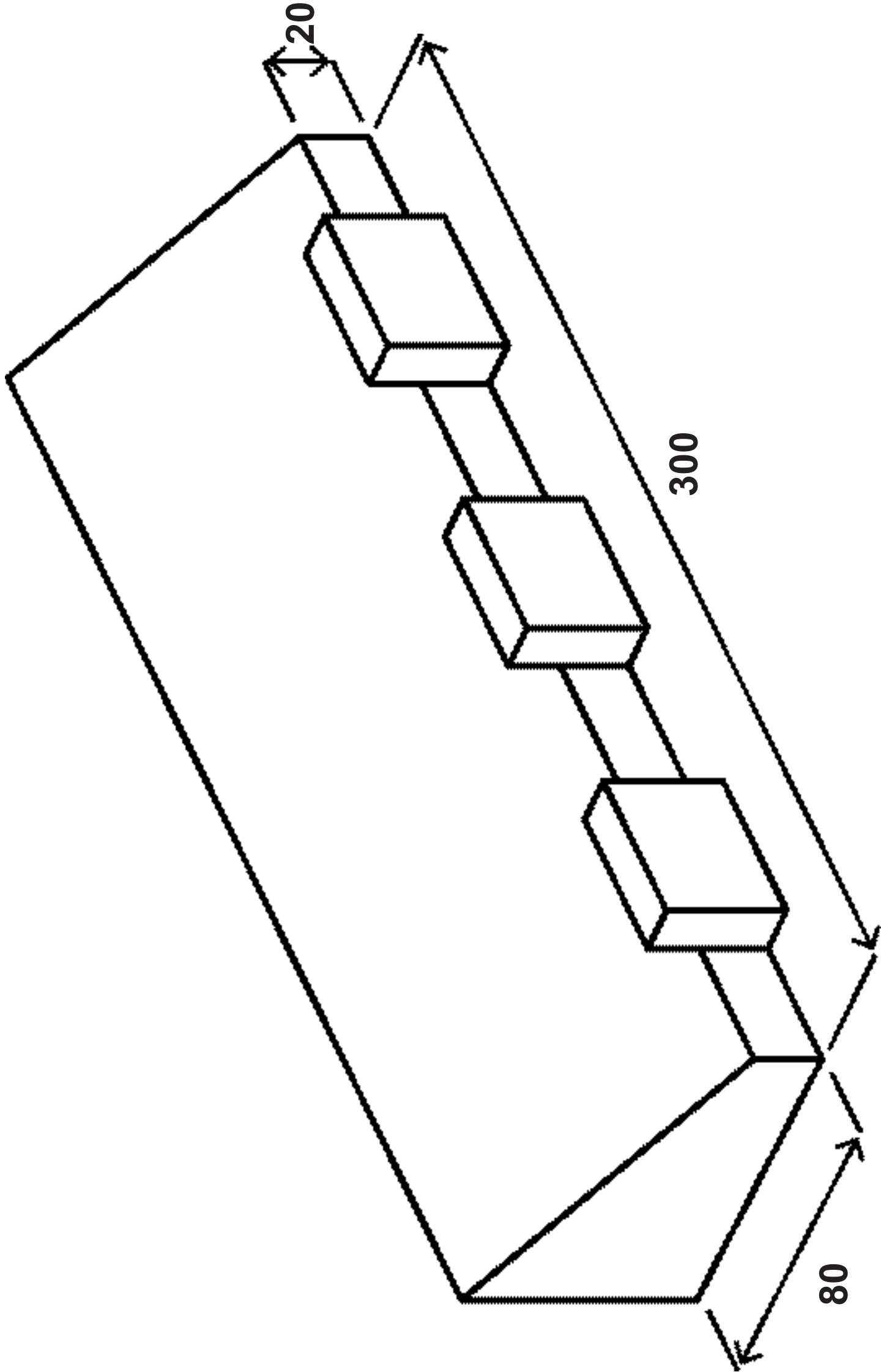
Question 4

FIGURE 7



FIGURE 8

All dimensions in mm

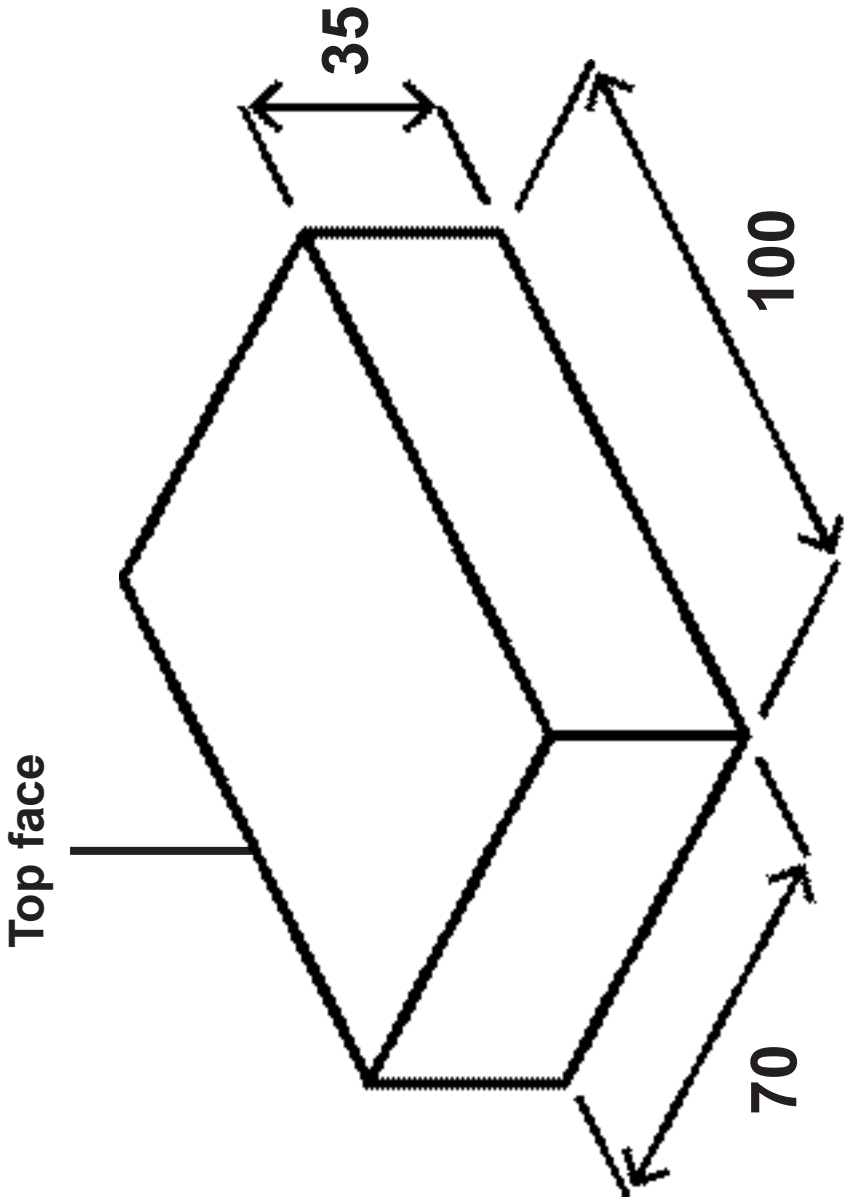


(continued on the next page)

FIGURE 8

Additional information – dimensions of box of chocolates

All dimensions in mm



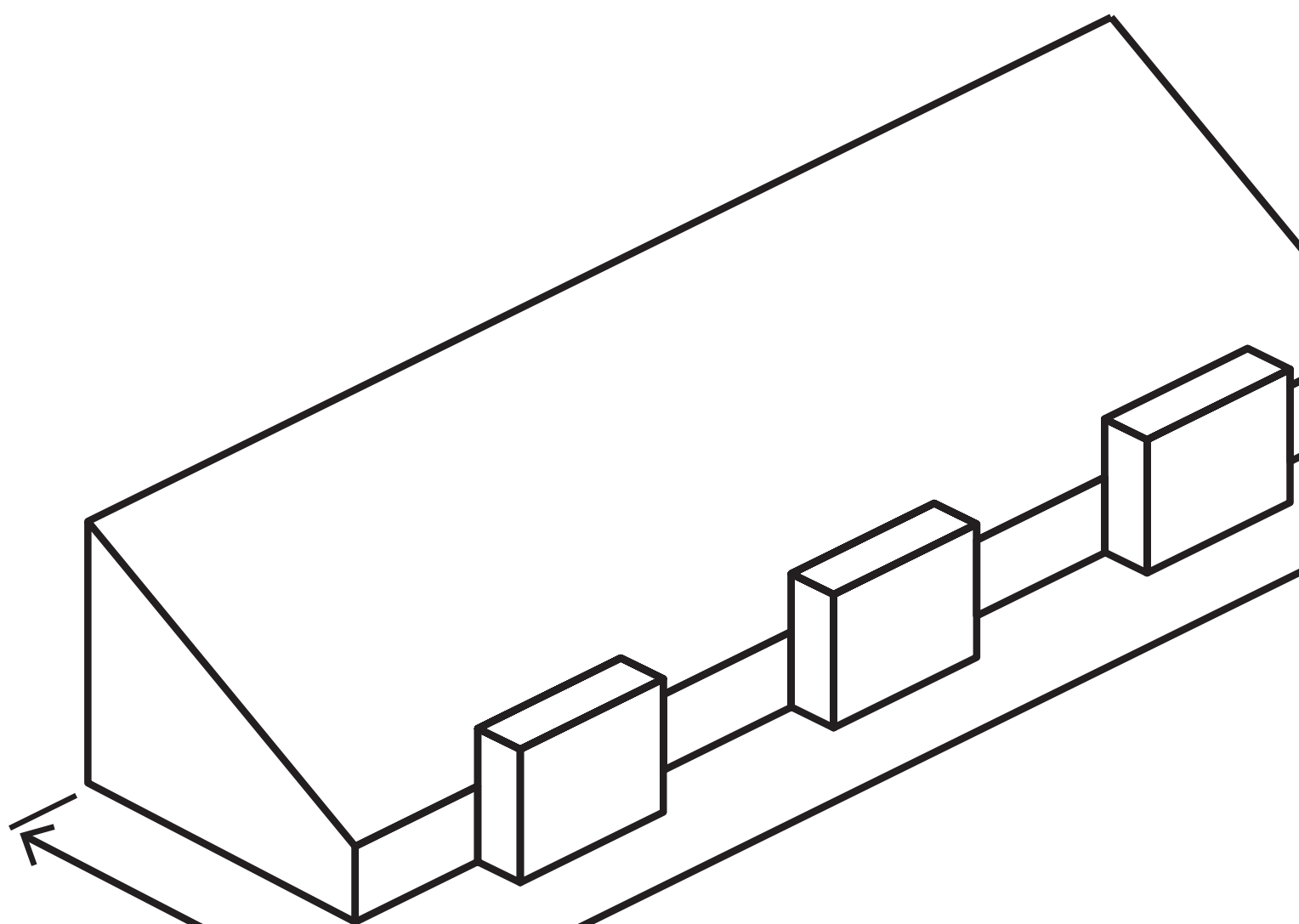
Question 5(a) – Outline

FIGURE 9

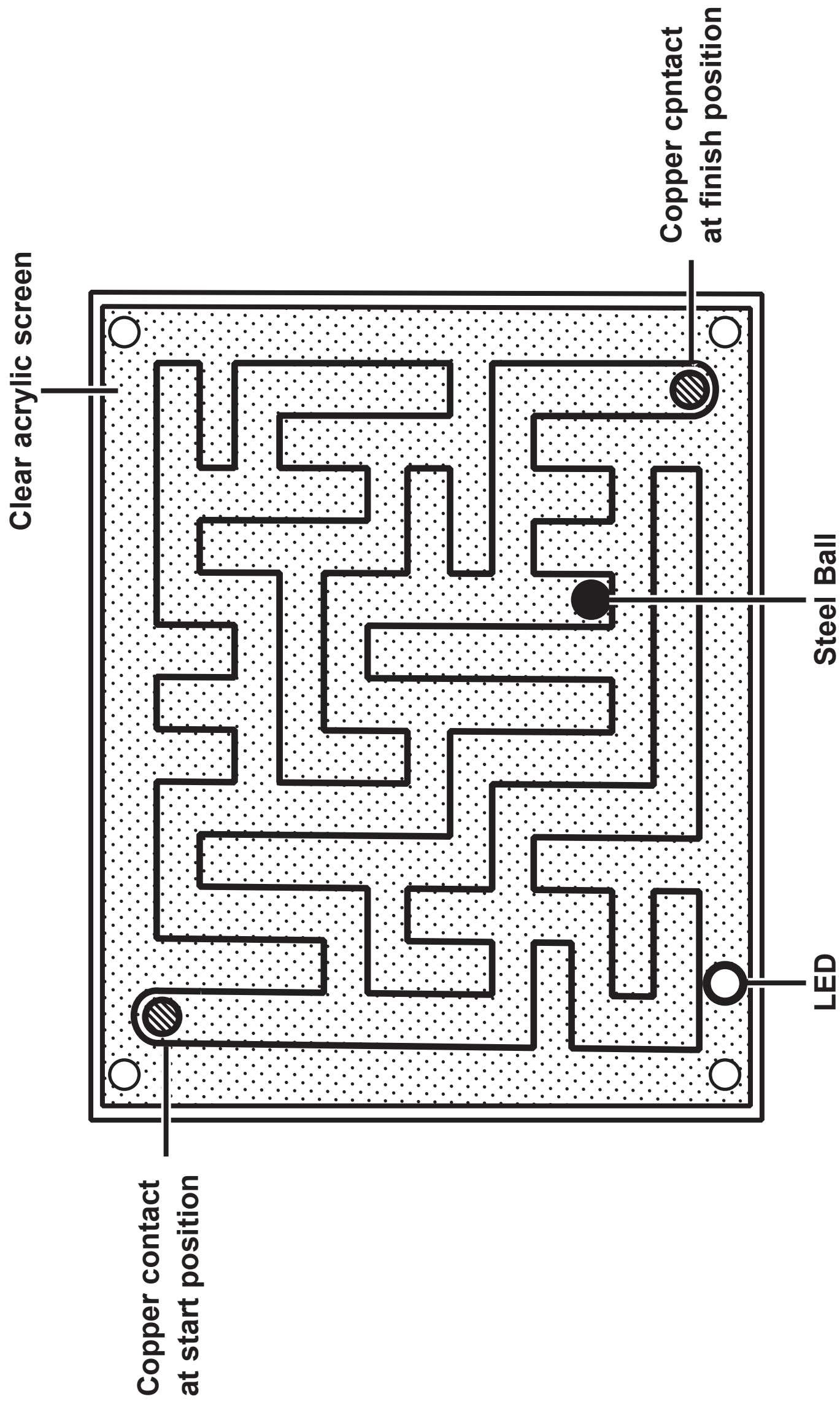
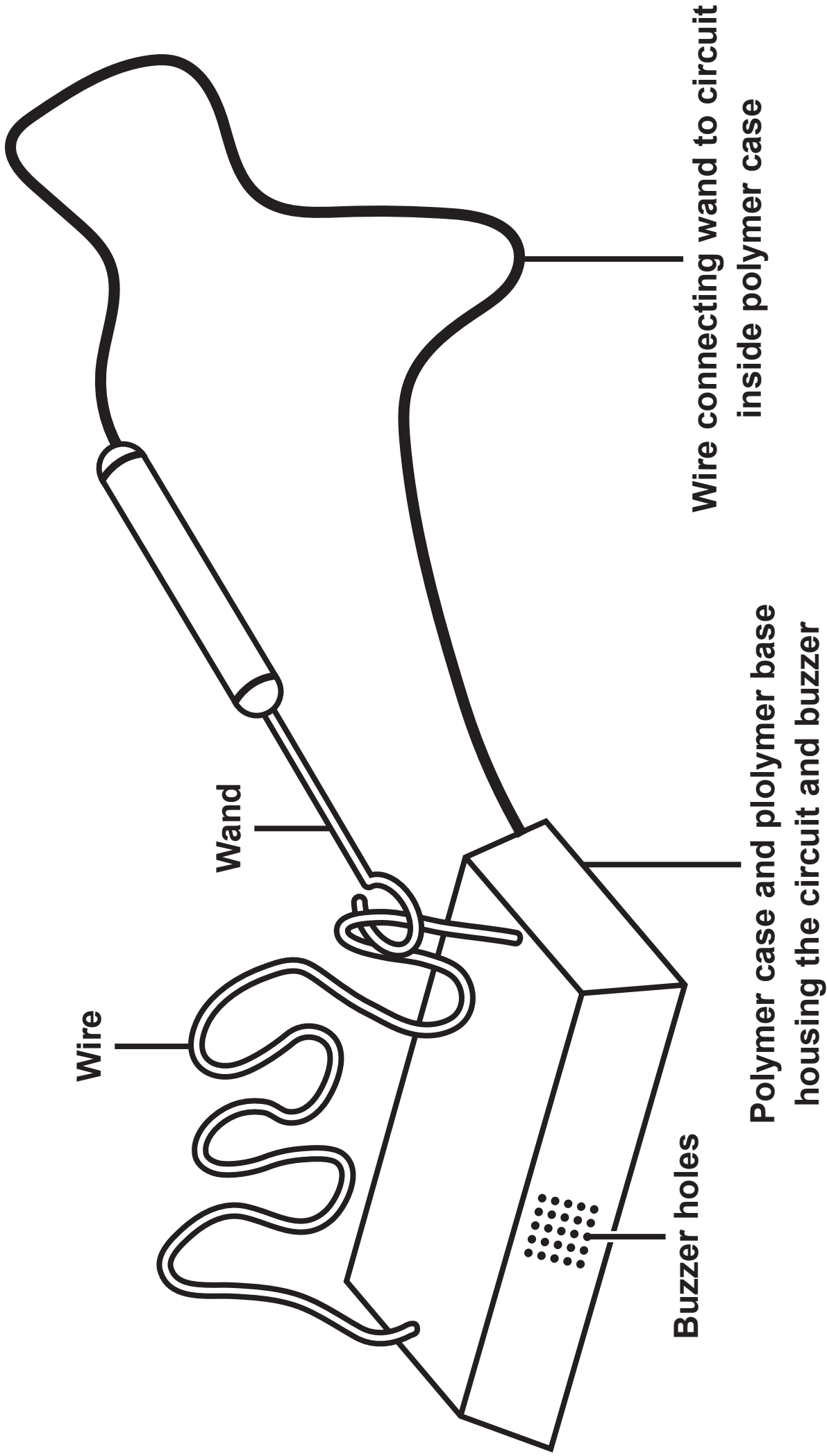
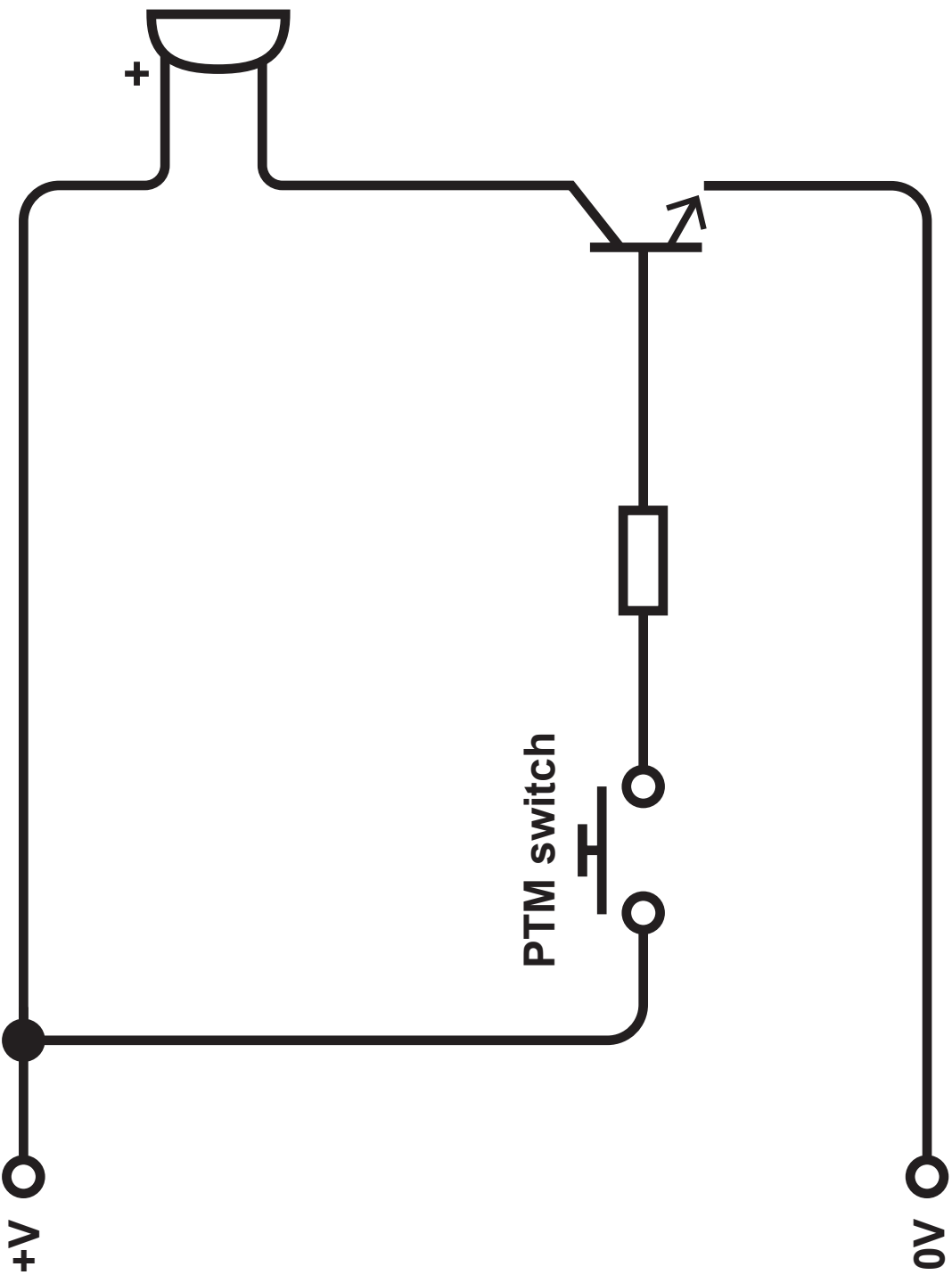


FIGURE 10



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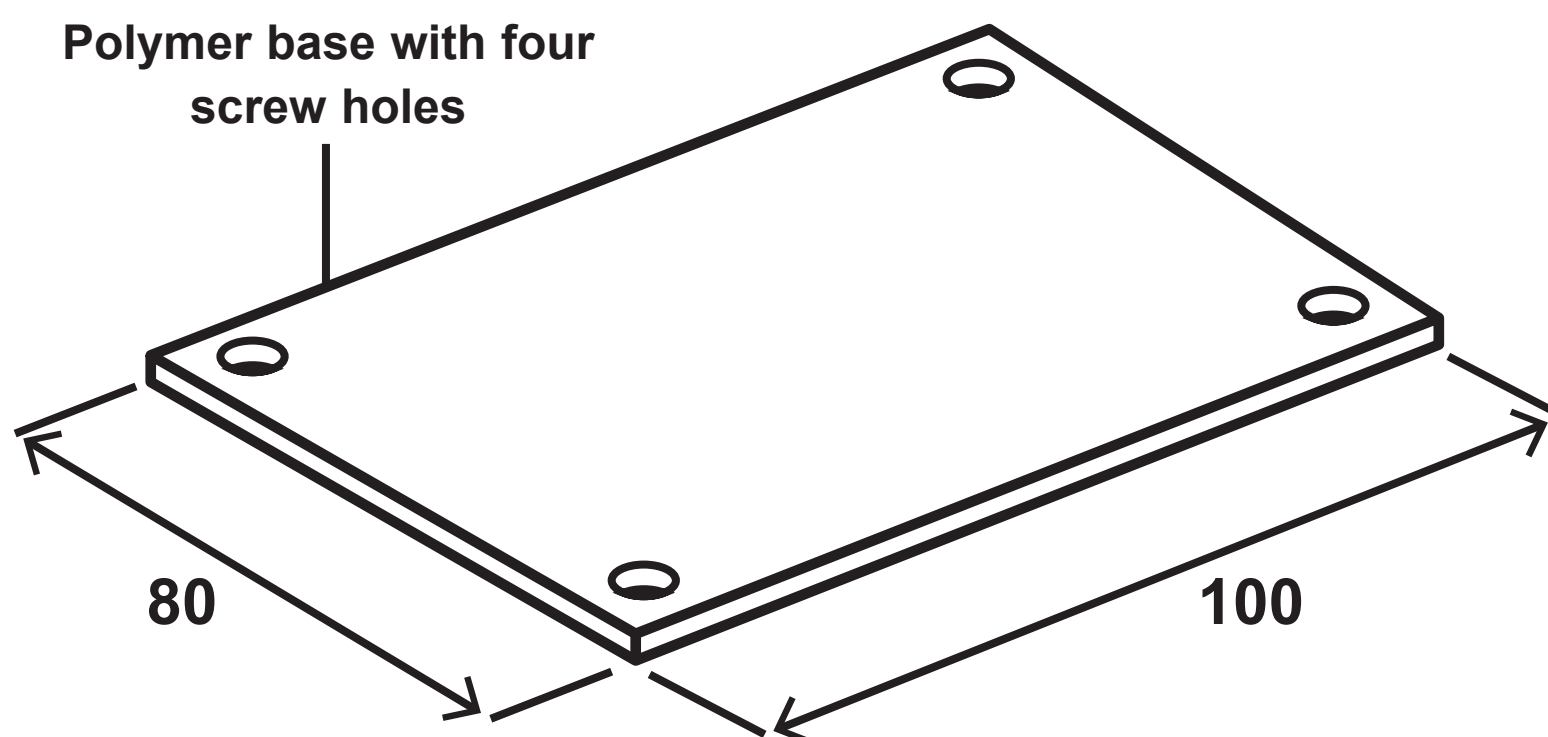
Circuit diagram



Question 6(b)

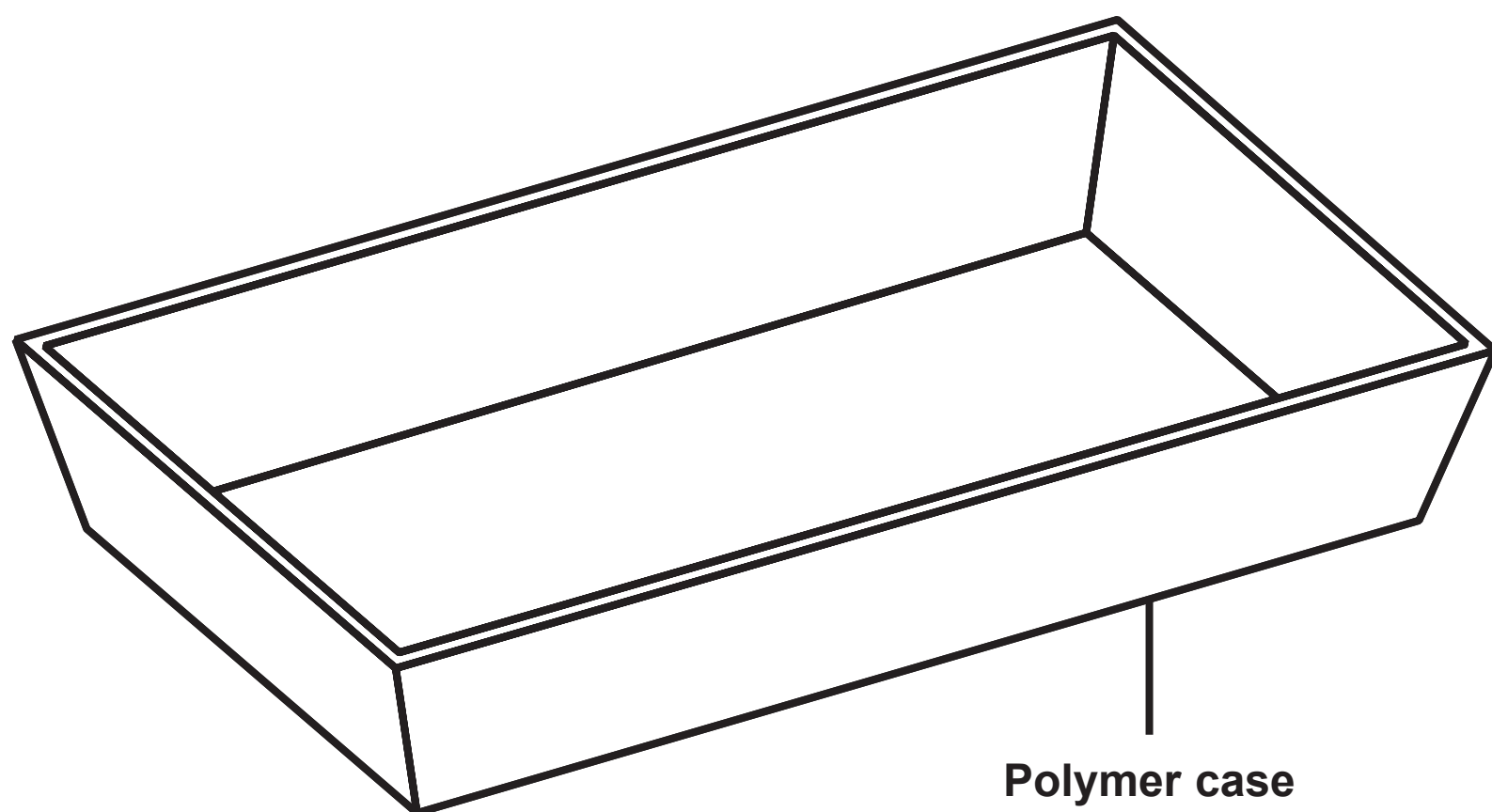
FIGURE 11

All dimensions in mm



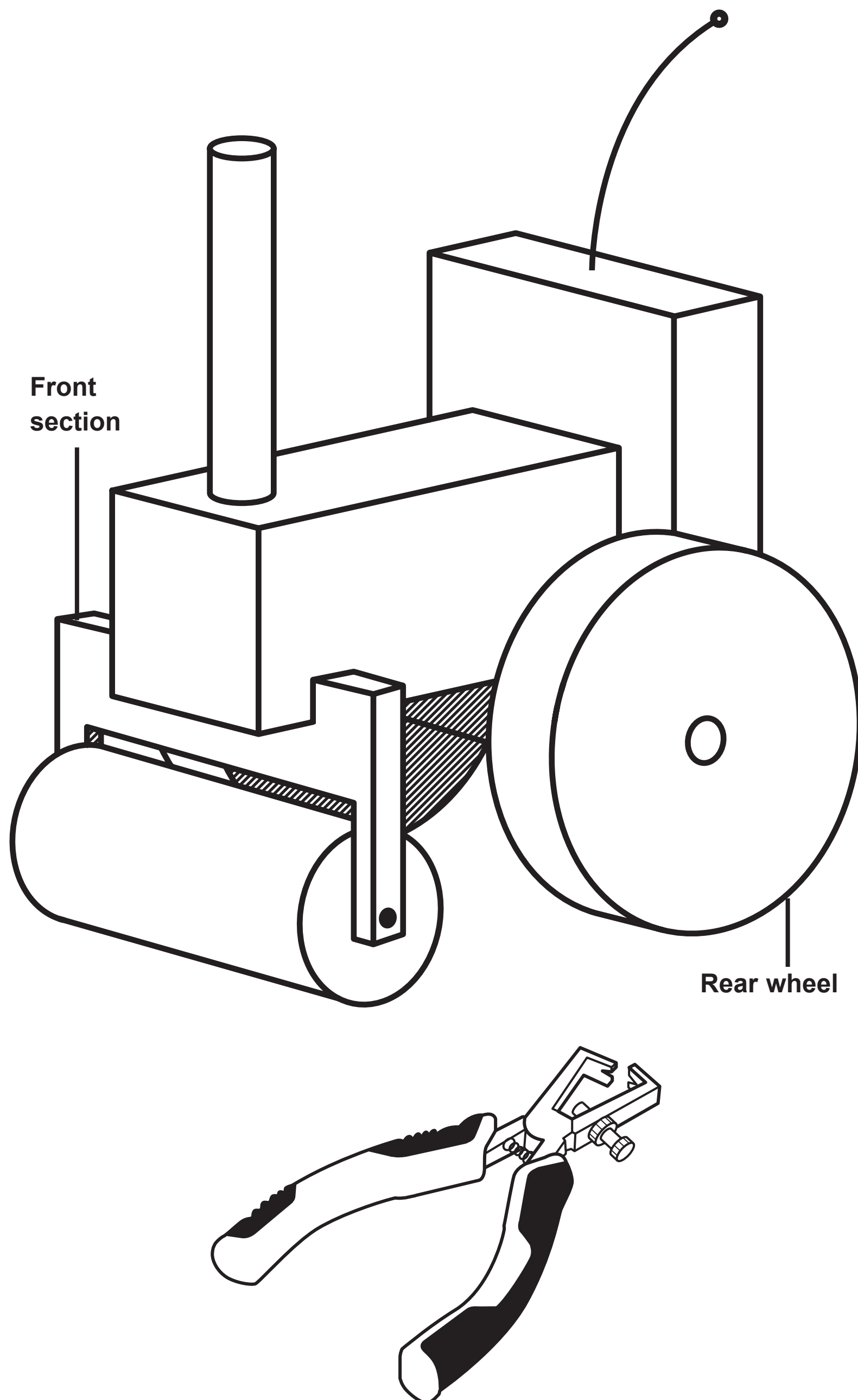
Question 6(d)

FIGURE 12



Question 7(a)

FIGURE 13



Question 7(b)

FIGURE 14

All dimensions in mm

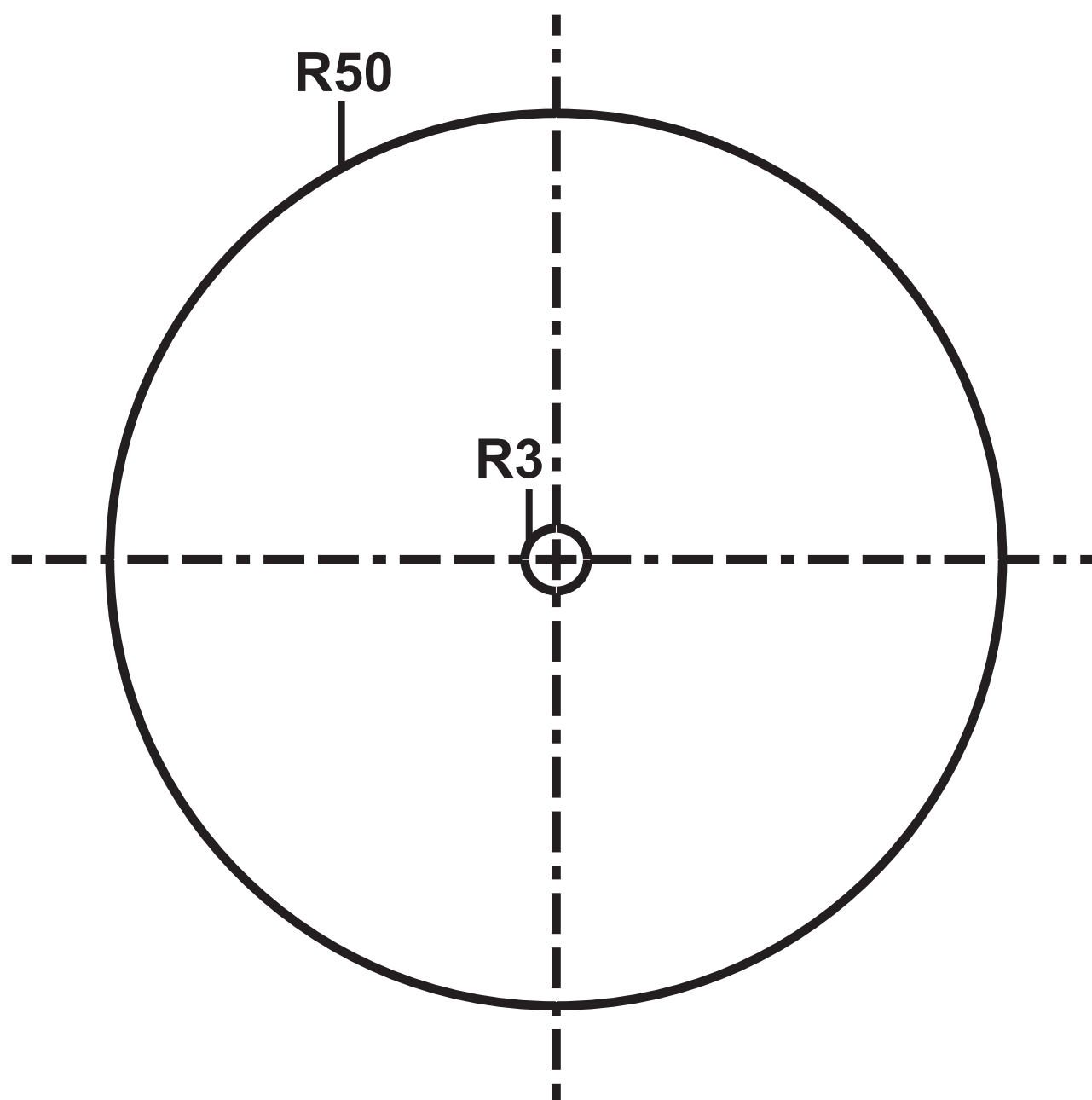
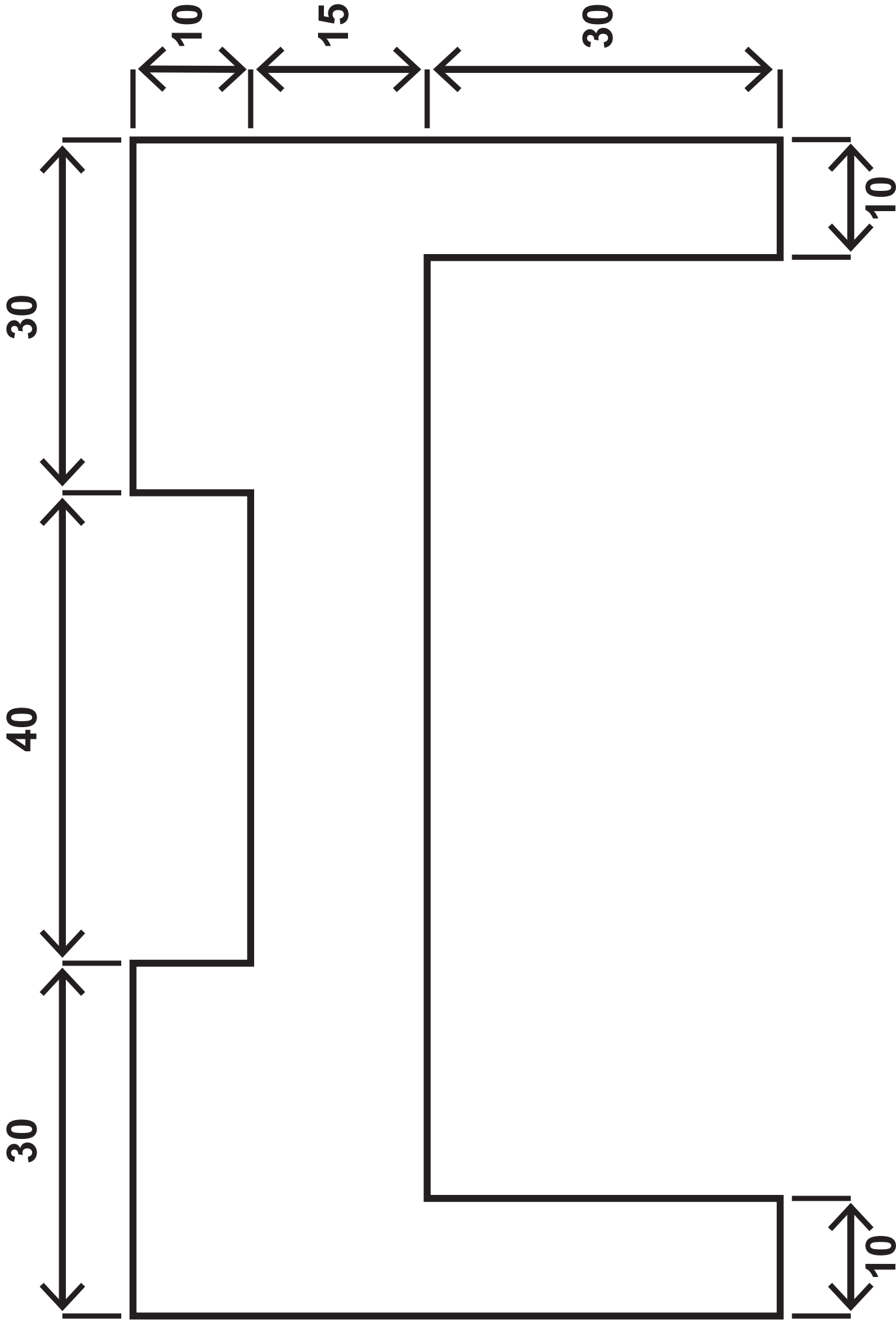


FIGURE 15

All dimensions in mm

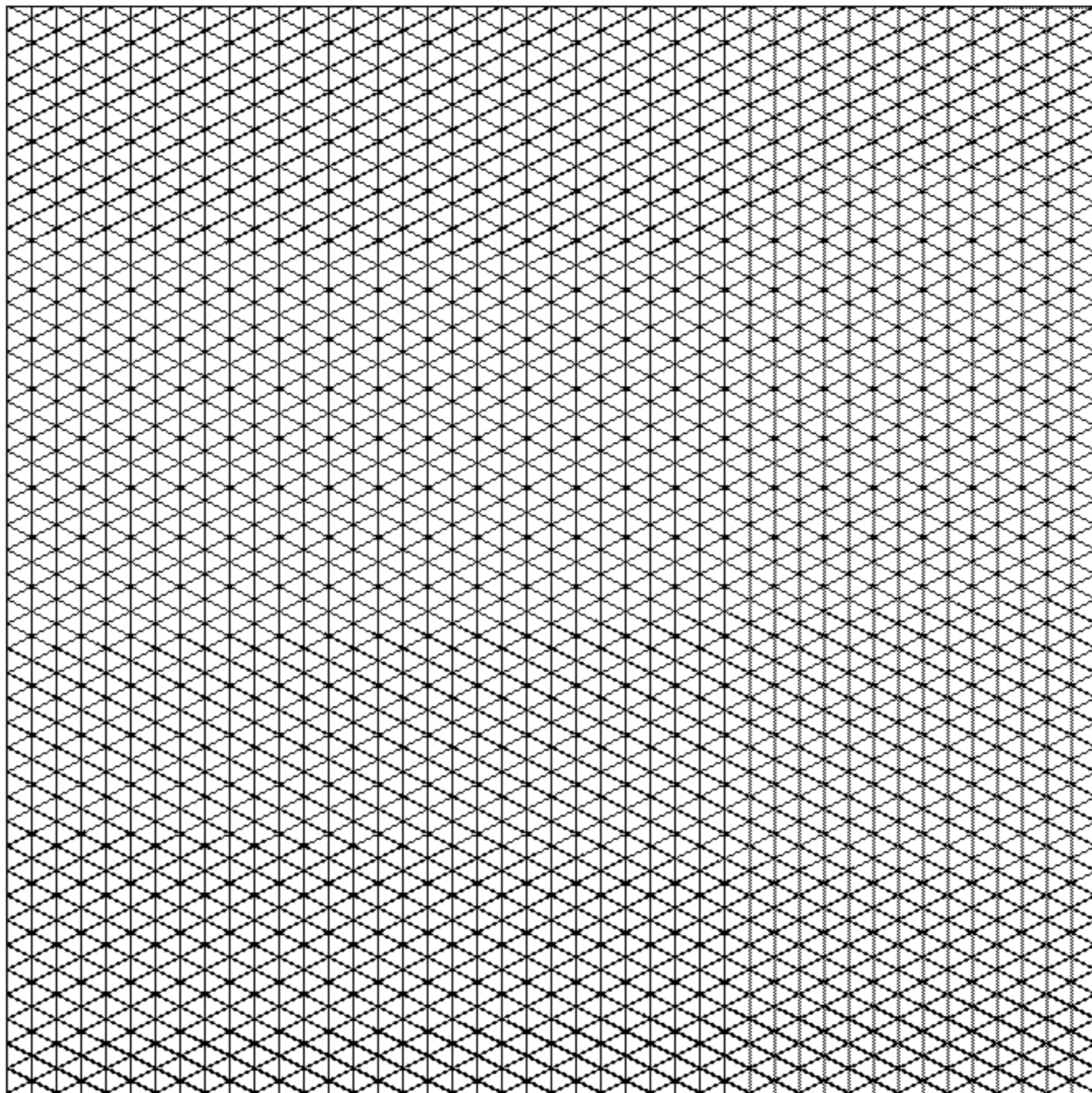
Diagram not to scale



Isometric grid provided on the next page.

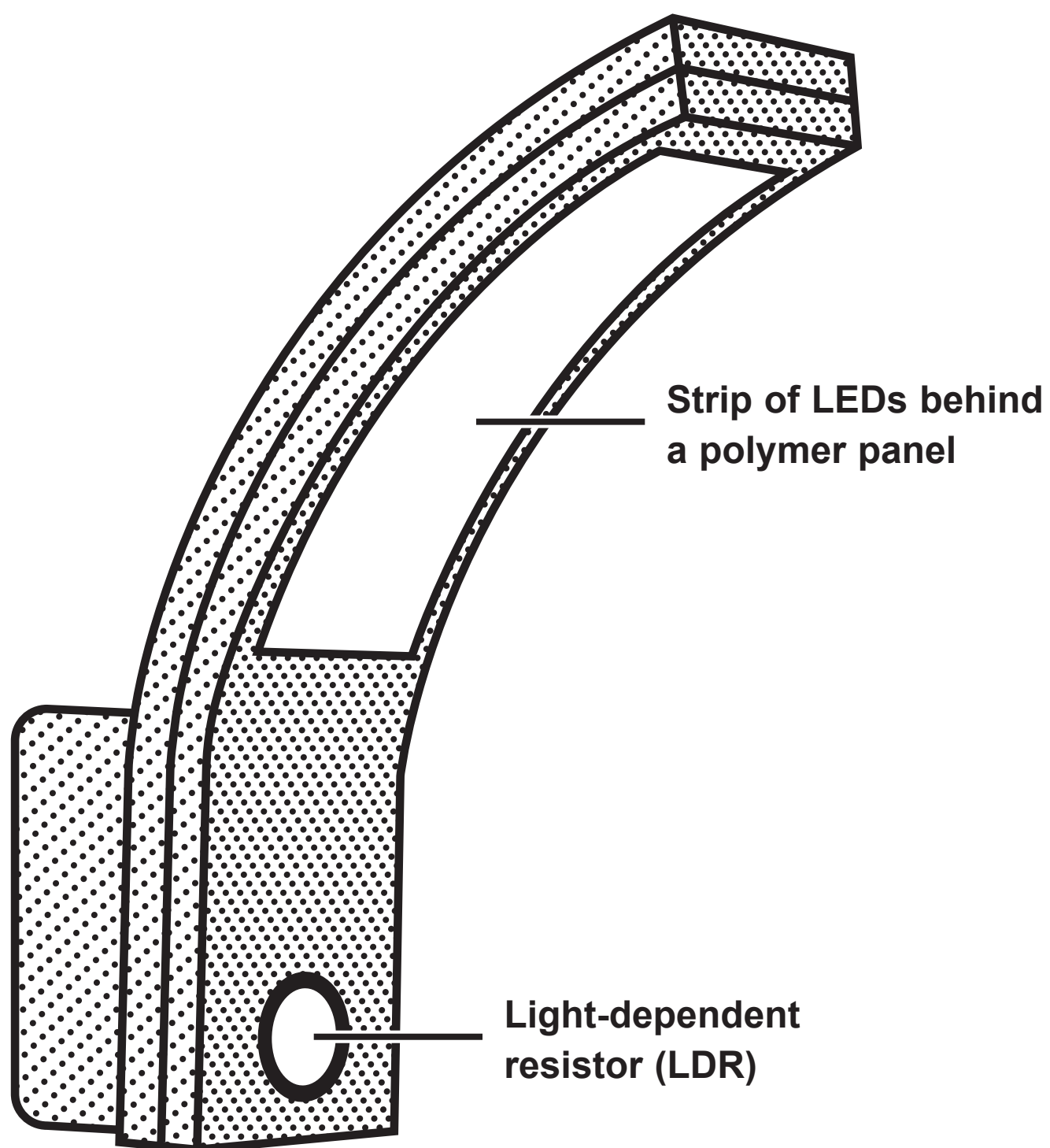
Question 7(c) continued.

5mm isometric grid



Question 8

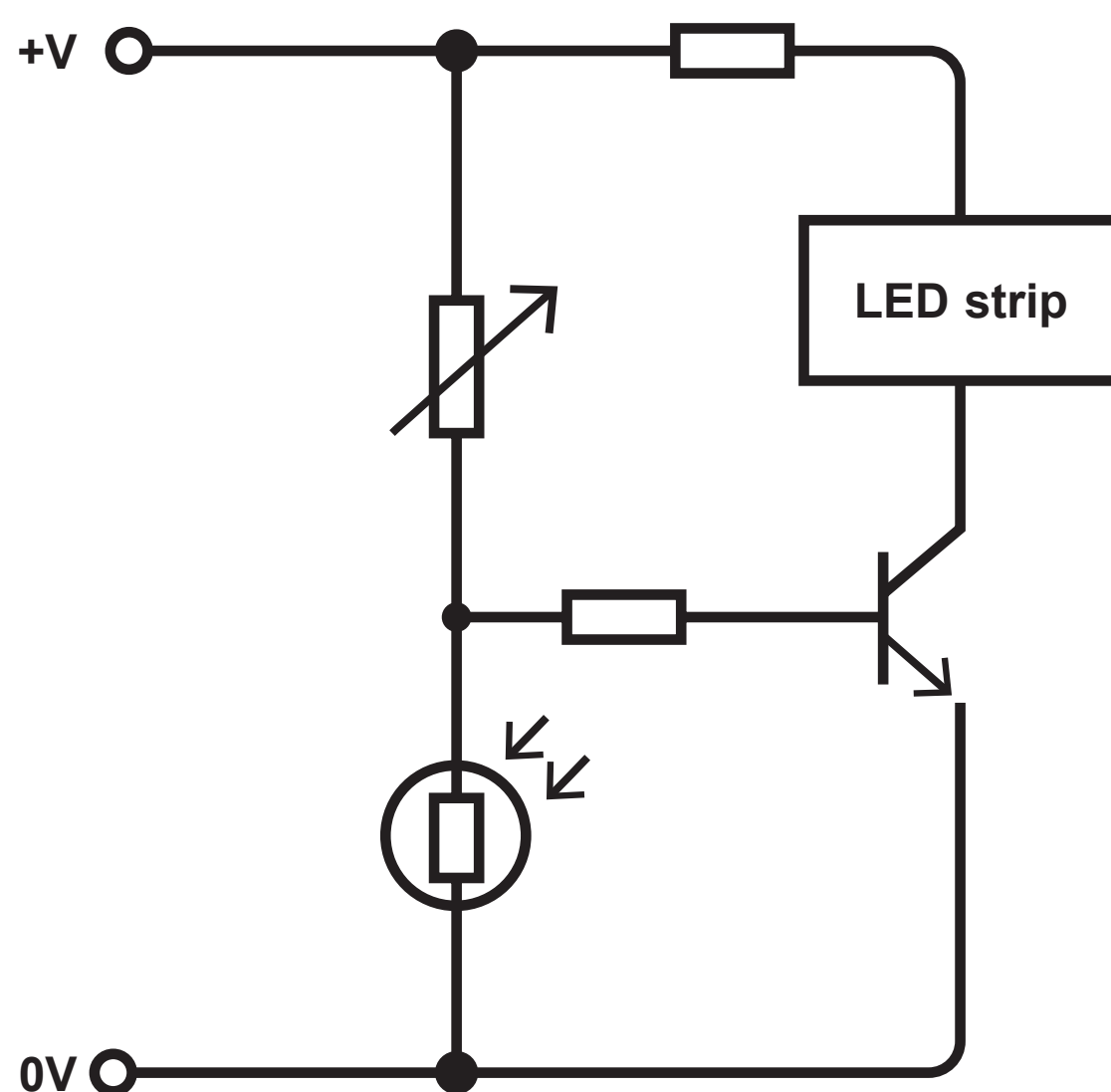
FIGURE 16



(continued on the next page)

Question 8 continued.

Circuit Diagram



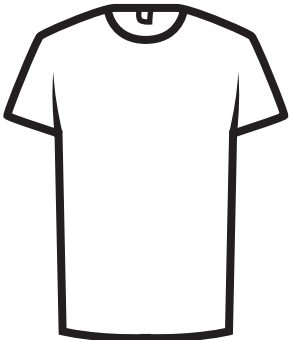
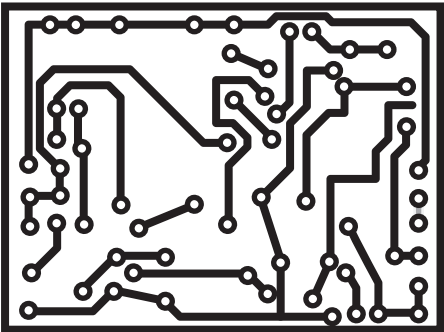
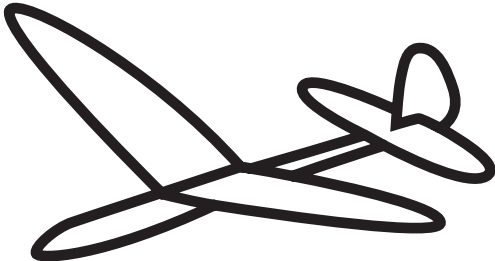

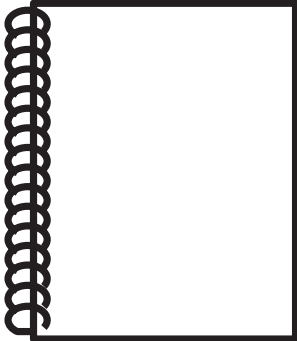
Question 8(d)

FIGURE 17

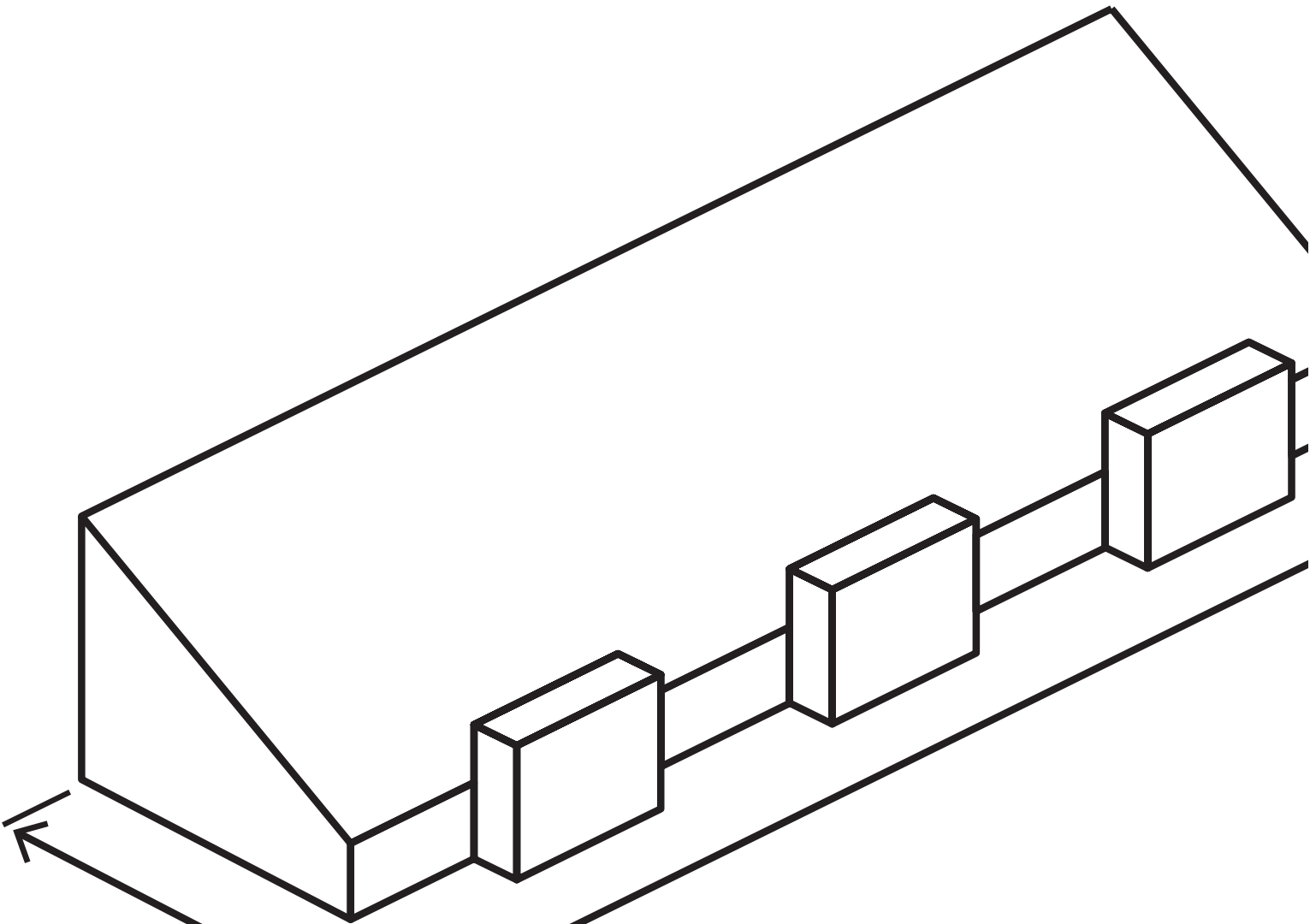
Source of components	Taiwan and China
Country of manufacture	France
Potential market	Schools, housing estates, private homes and other public buildings
Scale of production	Batch

Question 1(a)

FIGURE 1

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

Question 5(a) – Outline



Question 7(c) continued.

5mm isometric grid

