

Paper Reference 1MA1/3H  
Pearson Edexcel  
Level 1/Level 2 GCSE (9–1)

Mathematics  
PAPER 3 (Calculator)  
Higher Tier

Monday 13 November 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.

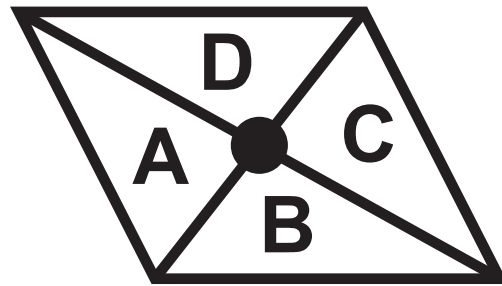
**THIS DIAGRAM BOOKLET MUST BE RETURNED  
WITH THE QUESTION PAPER AT THE END OF THE  
EXAMINATION.**

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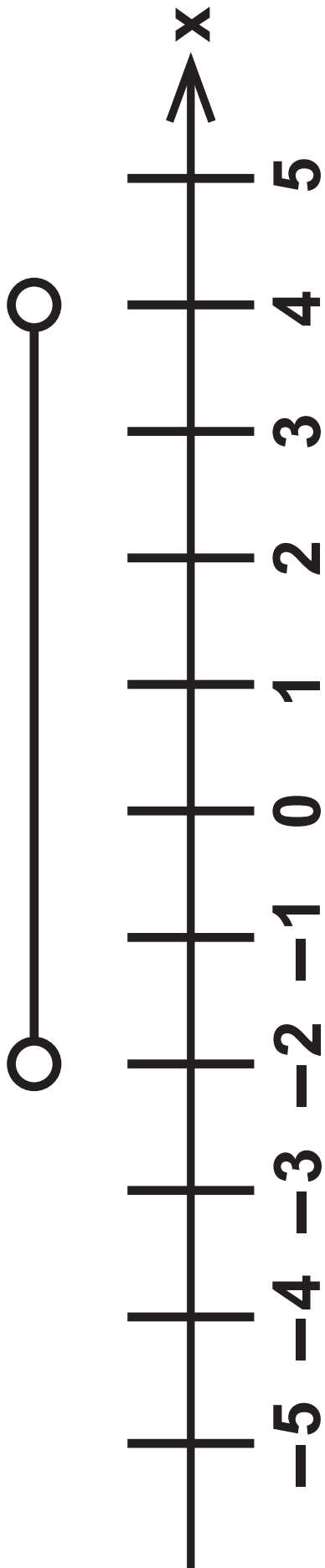
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Question 2

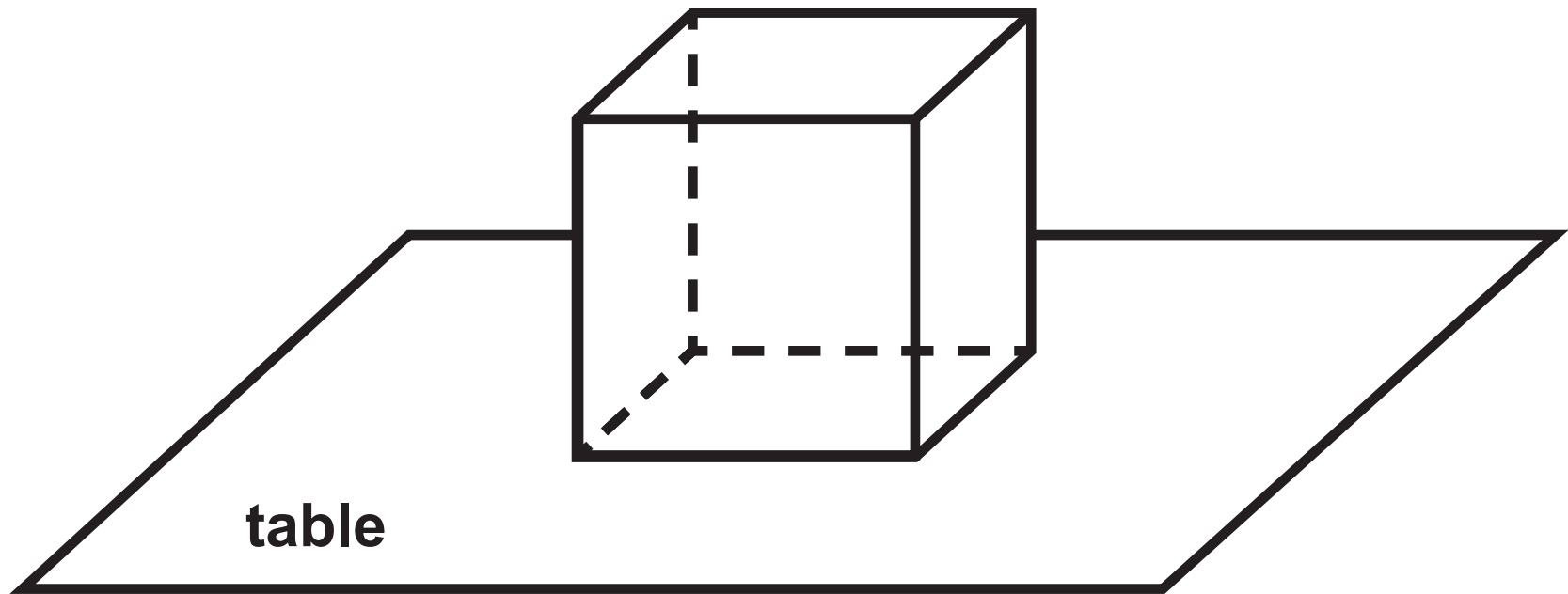


Question 3

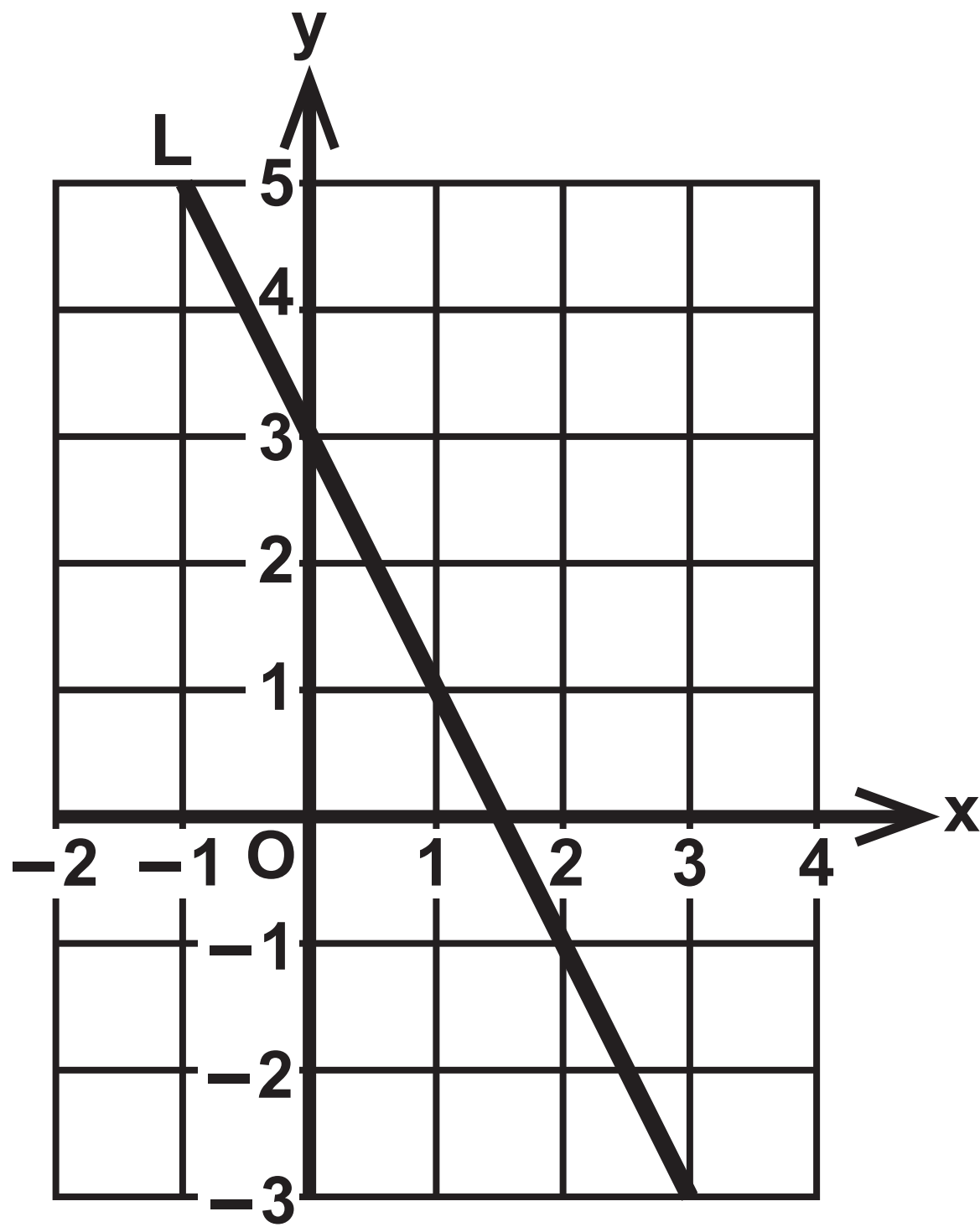
Temperature ( $T^{\circ}\text{C}$ )	Frequency
$10 < T \leq 15$	2
$15 < T \leq 20$	8
$20 < T \leq 25$	13
$25 < T \leq 30$	21
$30 < T \leq 35$	6



Question 8

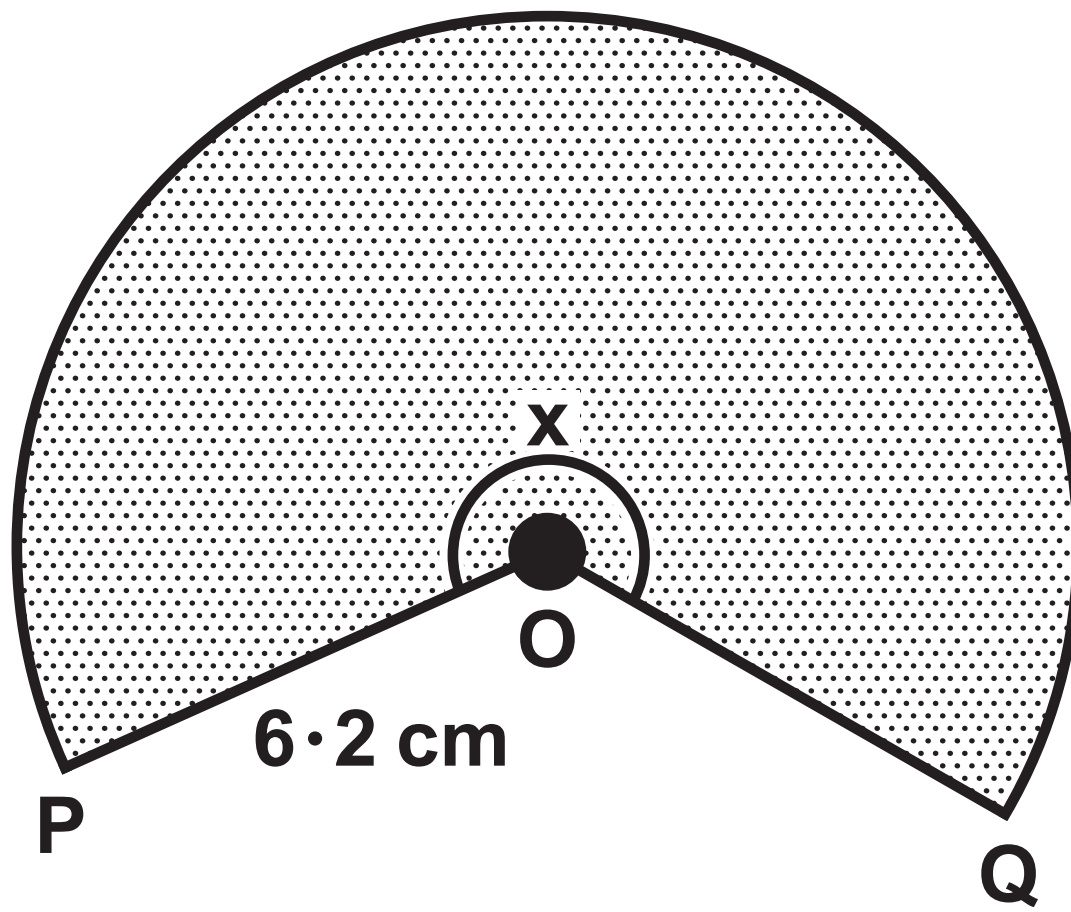


## Question 9

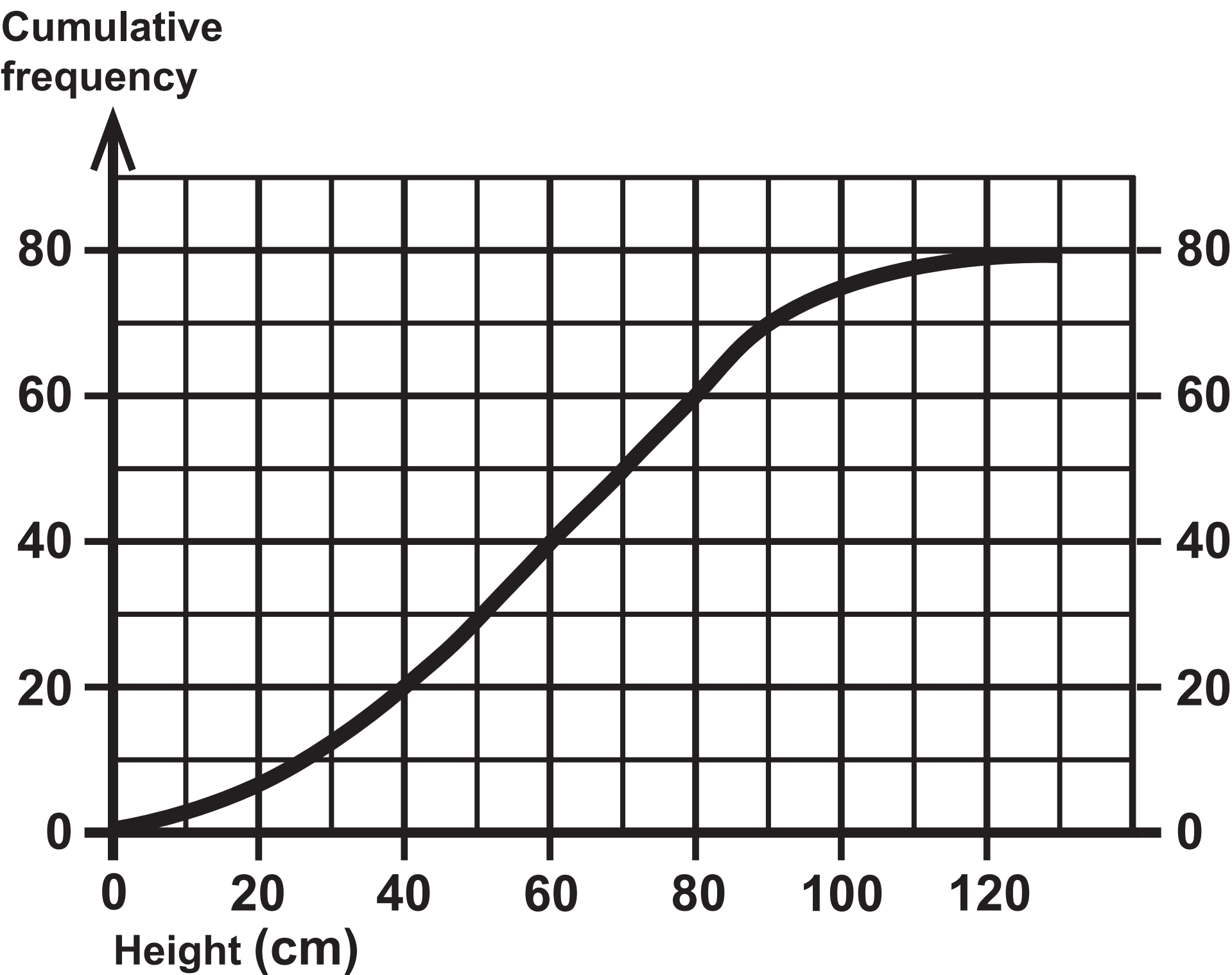




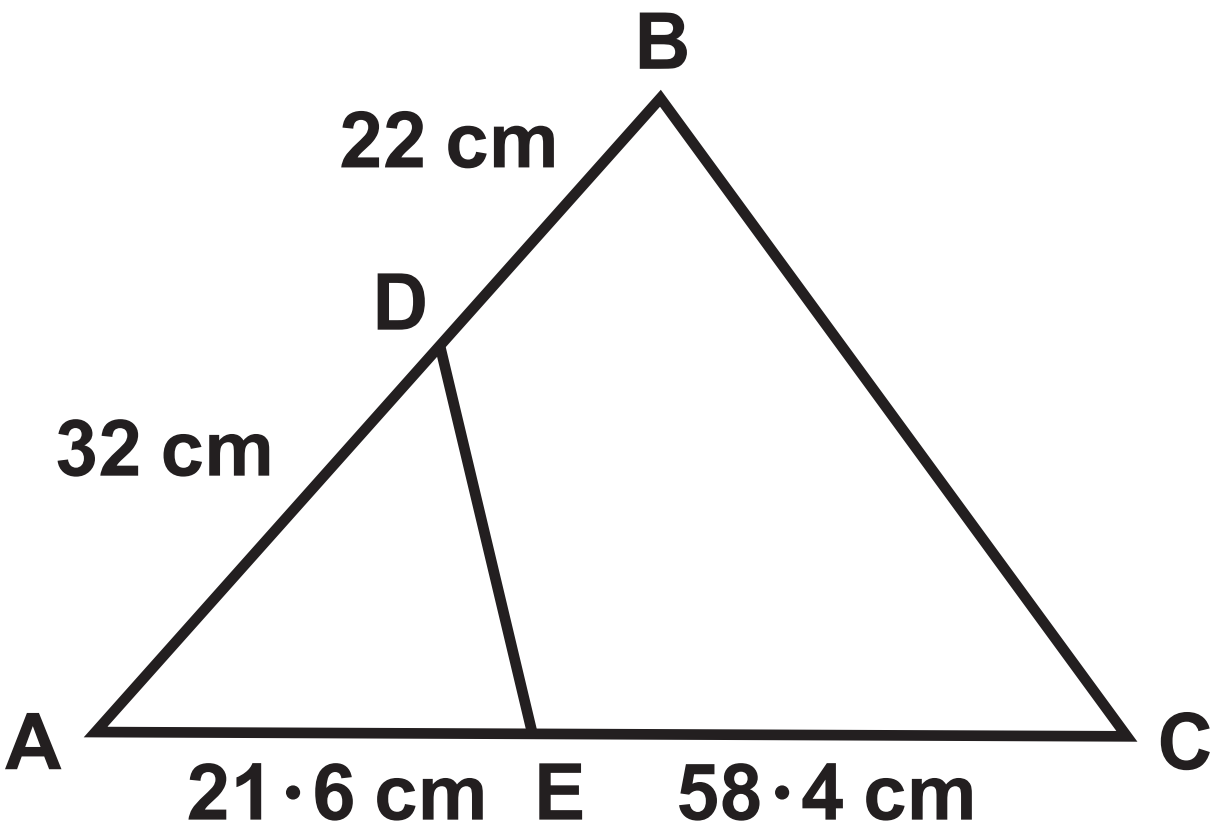
## Question 12



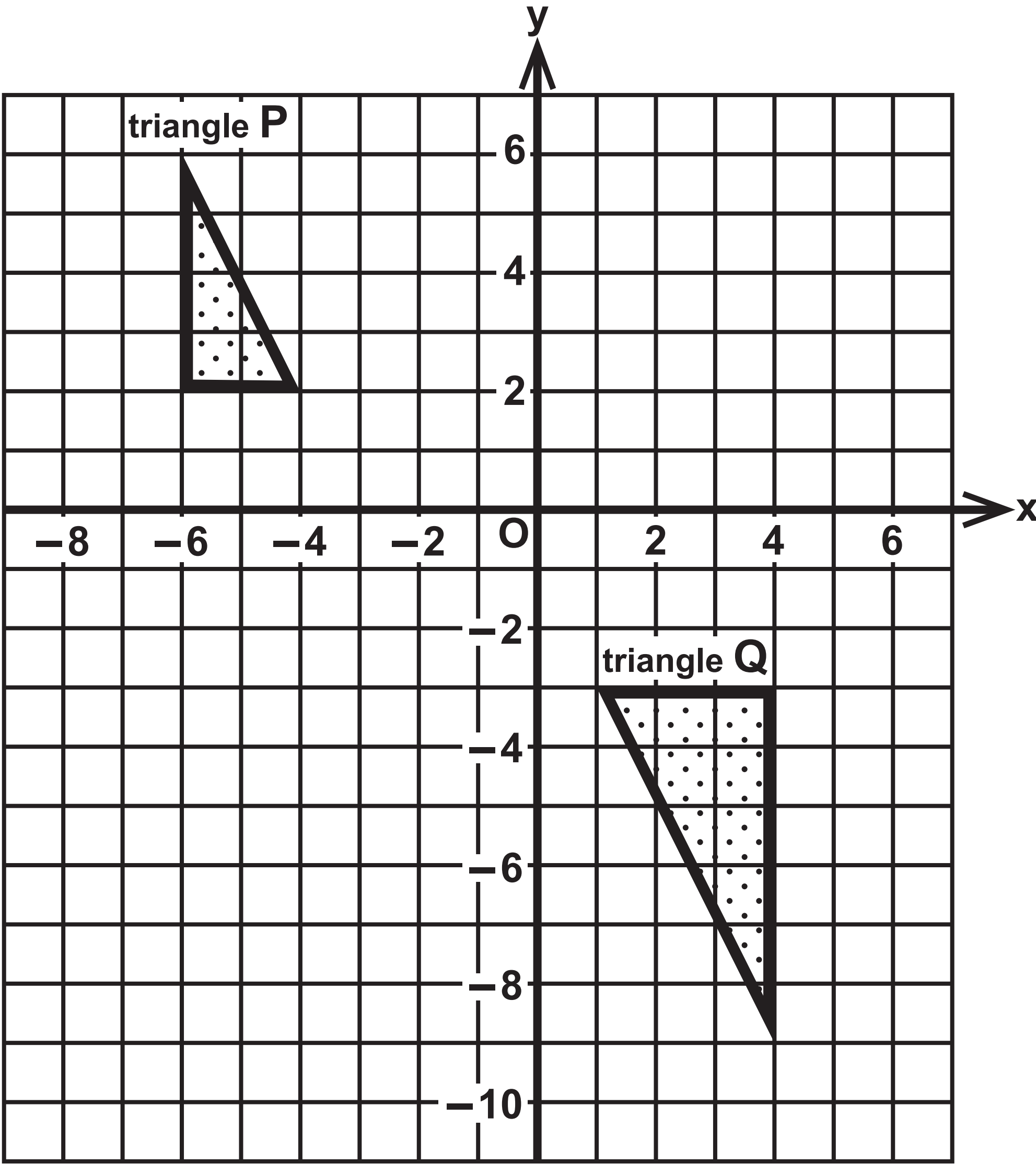
Question 13



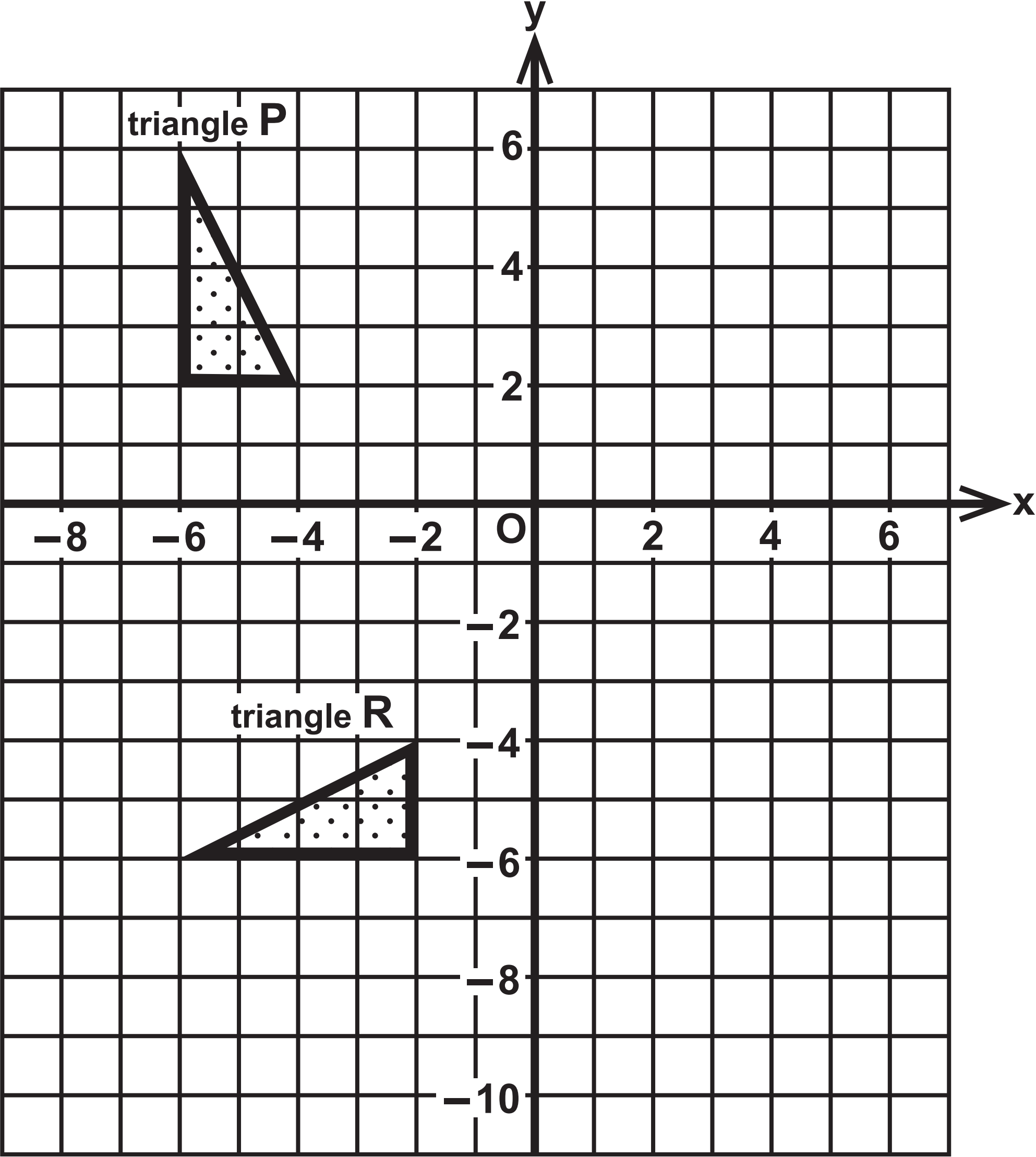
Question 15



Question 18(a)



Question 18(b)



## Question 19 – Diagrams

Diagram 1 – 3D view of frustum F

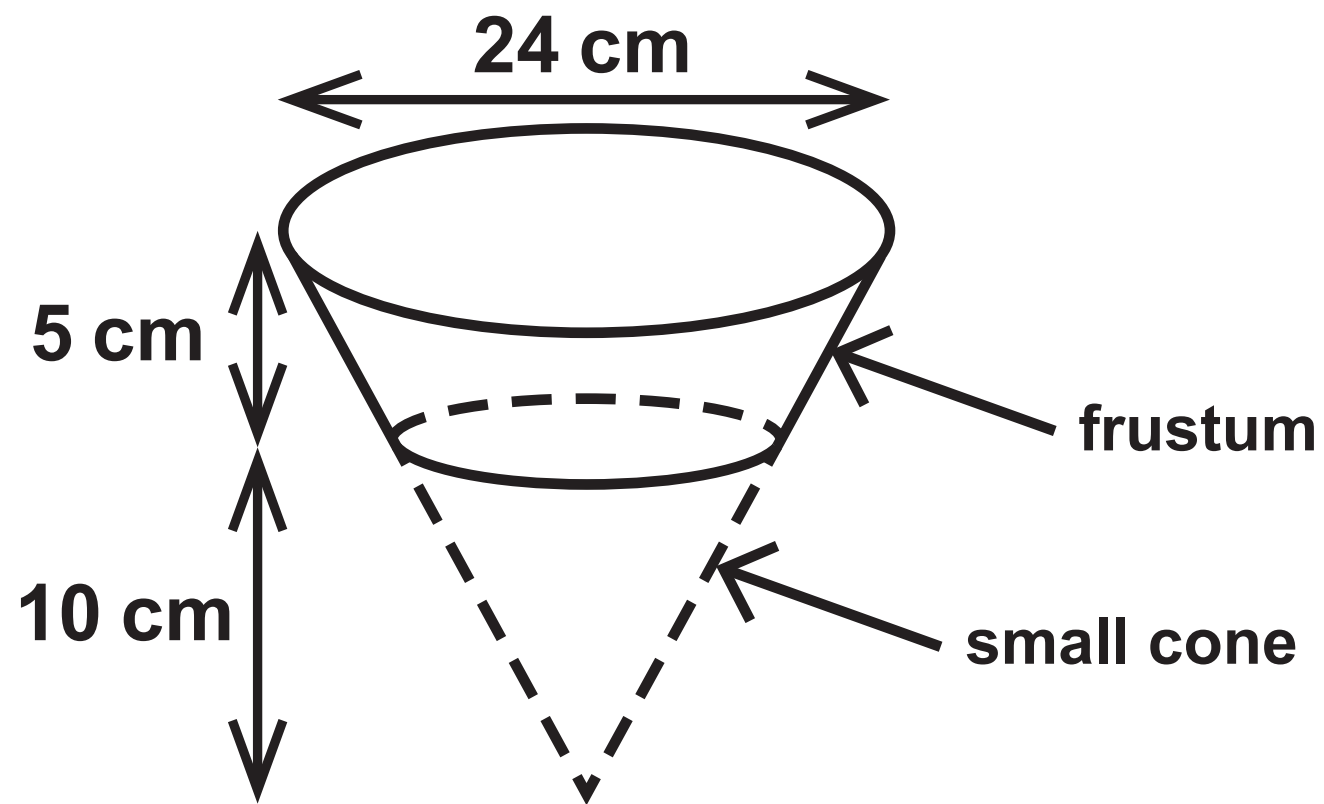
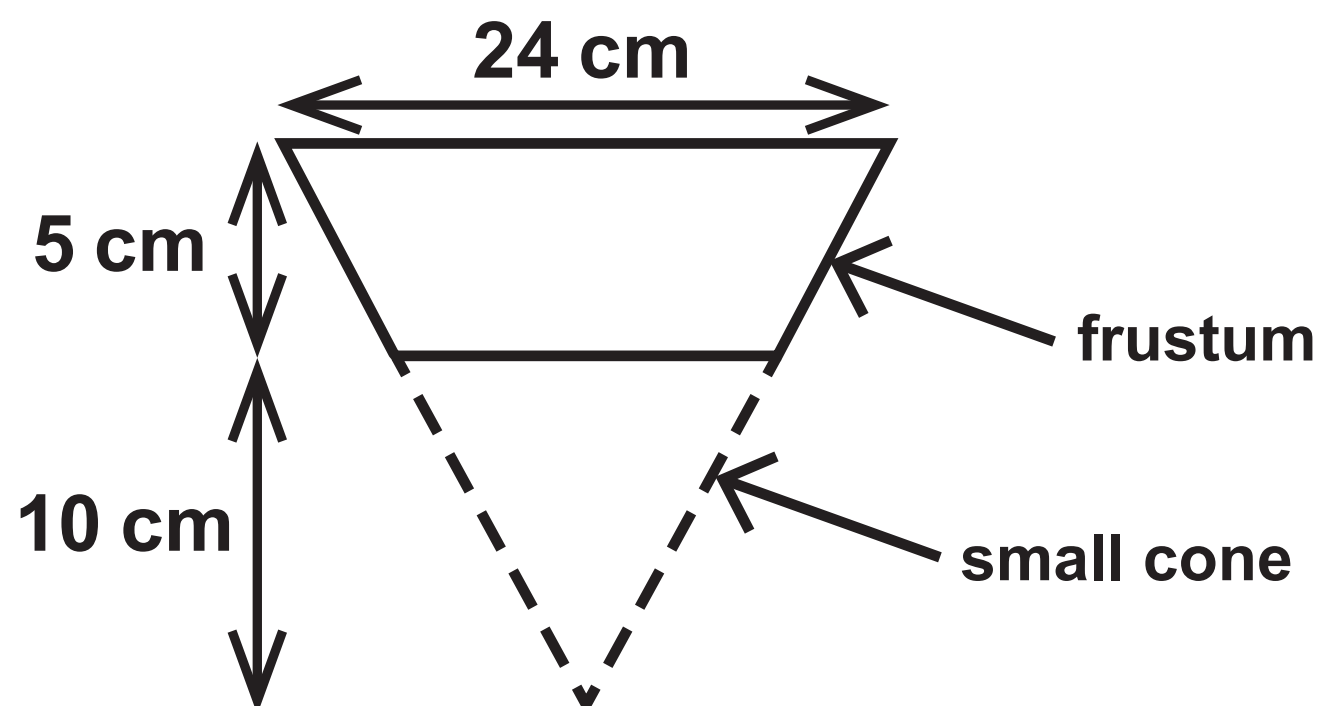


Diagram 2 – 2D view of frustum F



Question 19 – Diagrams

Diagram 3 – 3D view of solid S

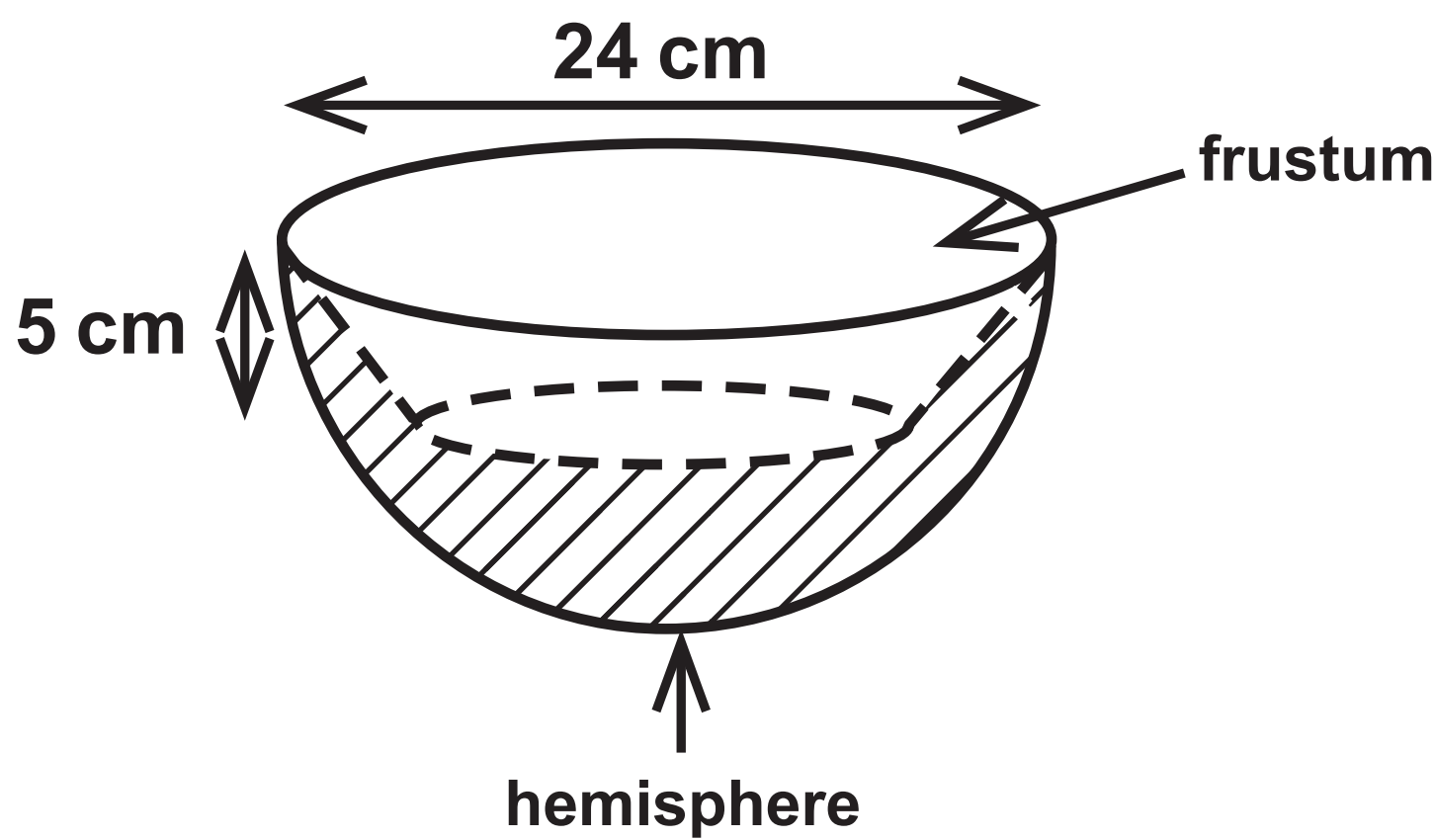
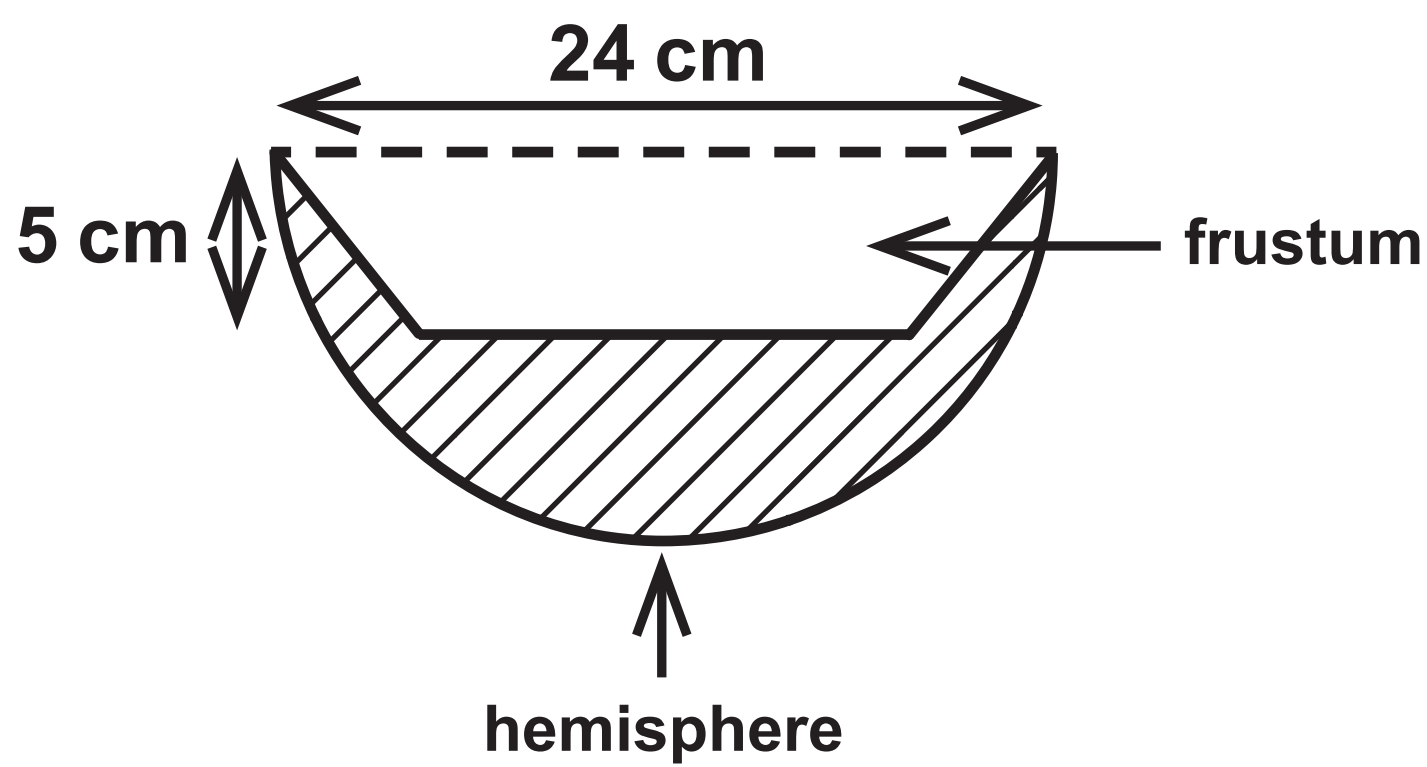
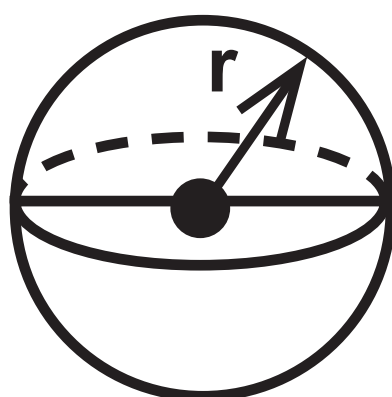


Diagram 4 – 2D view of solid S



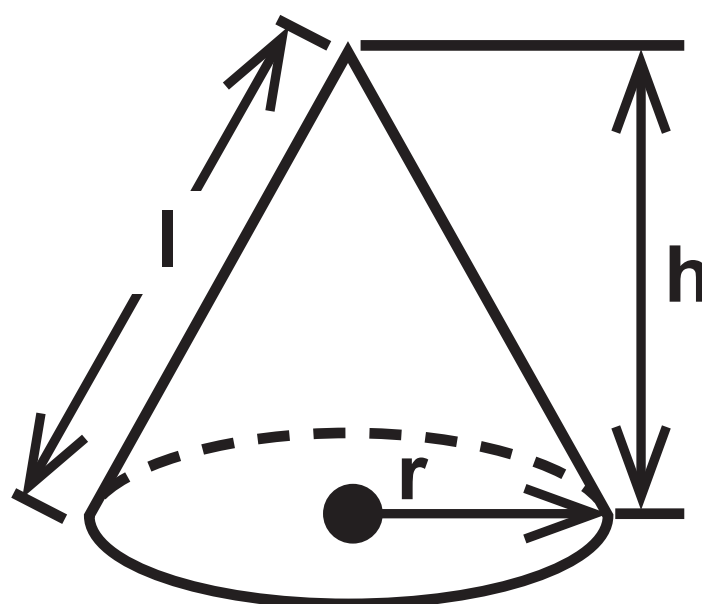
## Question 19 – Formulae

$$\text{Volume of sphere} = \frac{4}{3} \pi r^3$$



You may be provided with a model

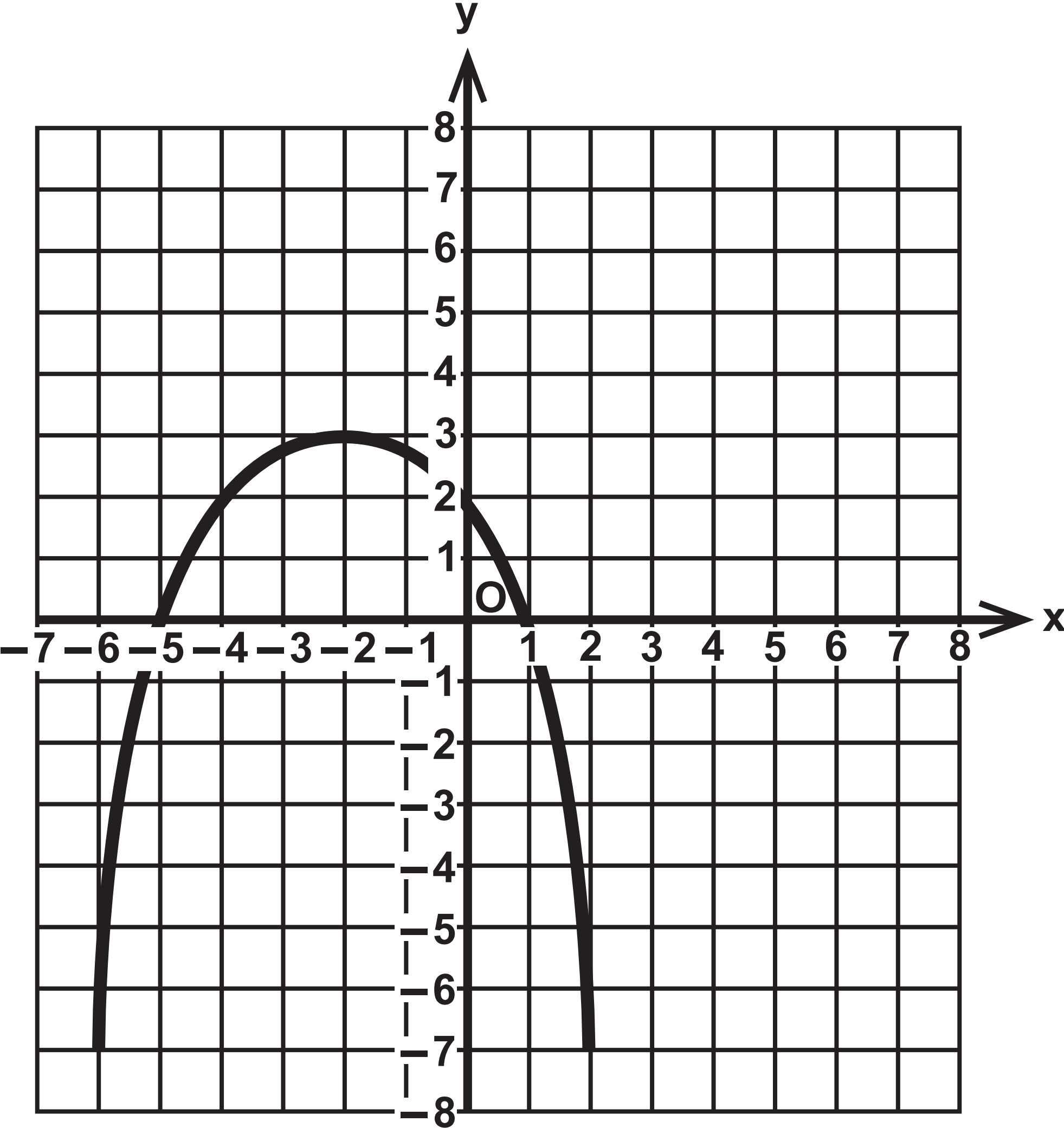
$$\text{Volume of cone} = \frac{1}{3} \pi r^2 h$$

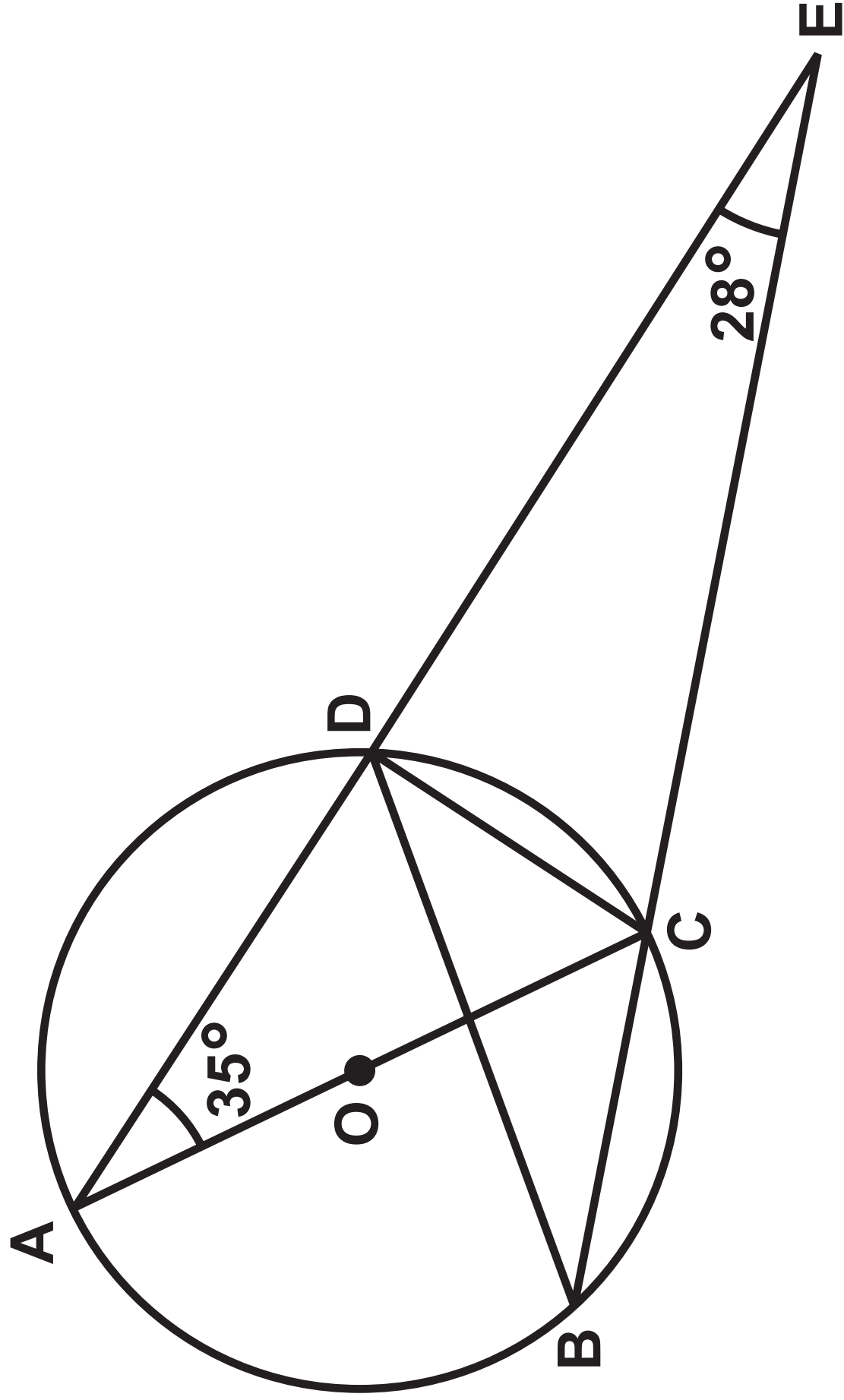


You may be provided with a model



Question 20(b)





**Question 22**

The materials to make all the bracelets cost **£190**, correct to the nearest **£5**

Ebony sells all the bracelets for a total of **£875**, correct to the nearest **£5**

The total time taken to make and sell all these bracelets was **72** hours, correct to the nearest hour.

Ebony uses this method to calculate her hourly rate of pay

$$\text{Hourly rate of pay} = \frac{\text{total selling price} - \text{total cost of materials}}{\text{total time taken}}$$

Question 24

Diagram 1 – 3D view of triangular prism

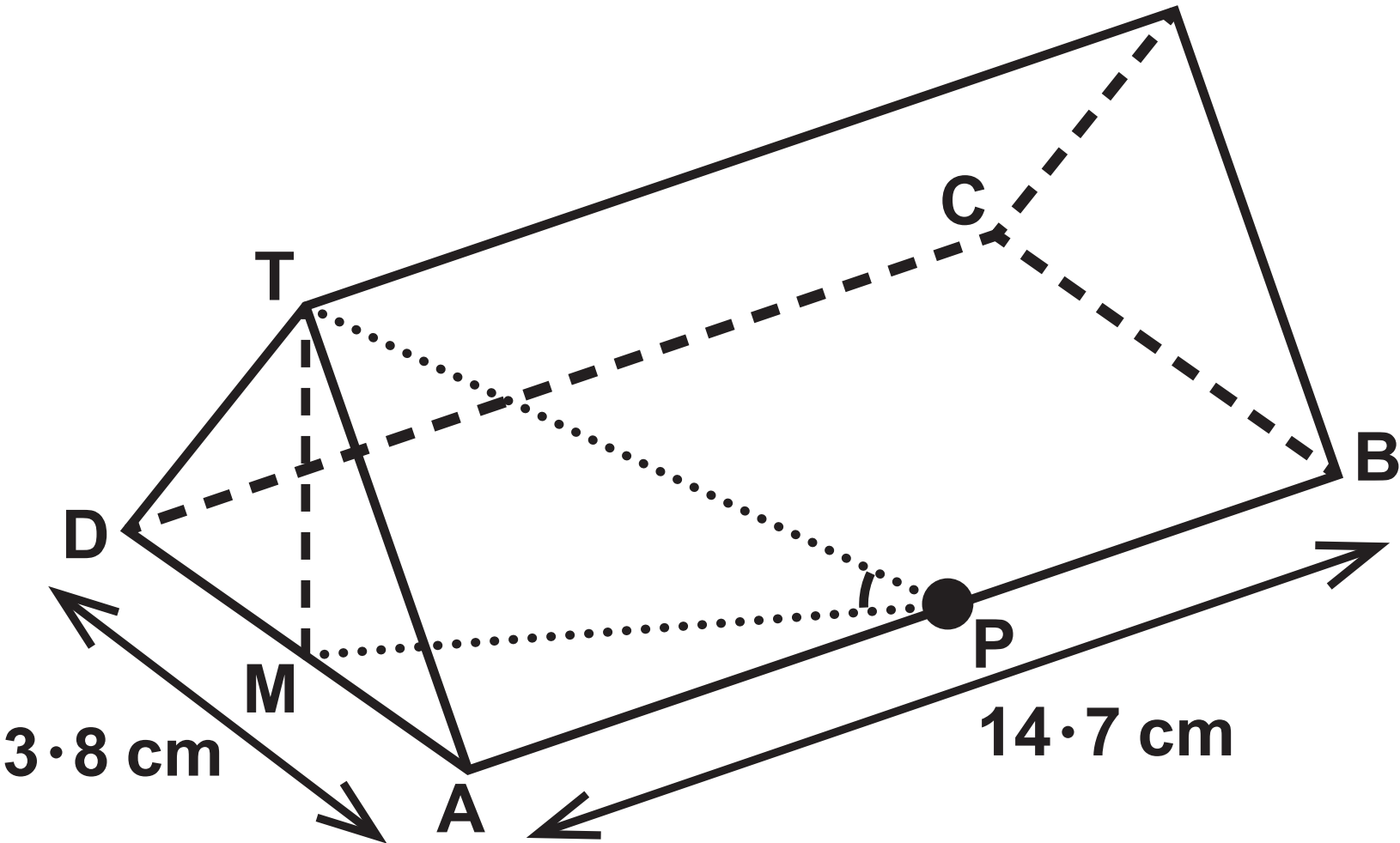
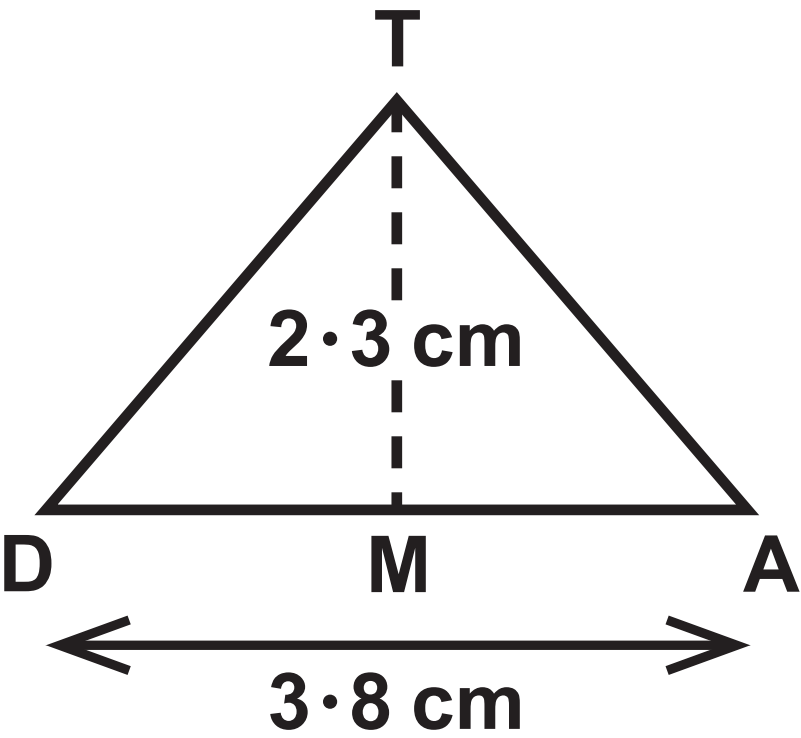


Diagram 2 – Face TAD of triangular prism



Question 20(b)

