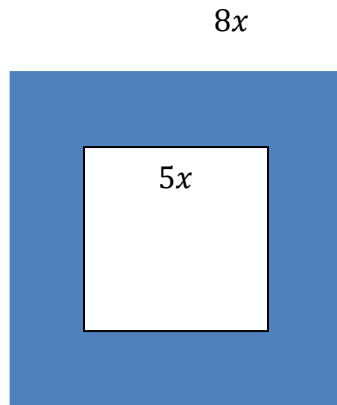


2. A square of length $5x$ is removed from a square shaped thin lamina of length $8x$ as shown in figure.

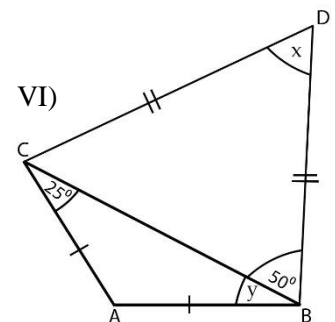
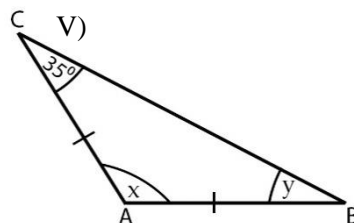
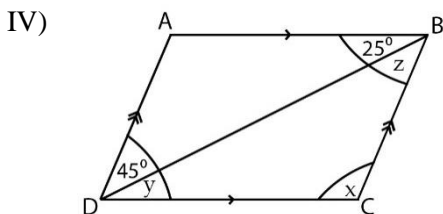
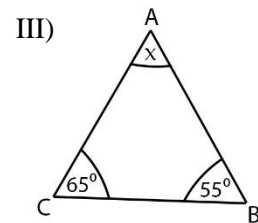
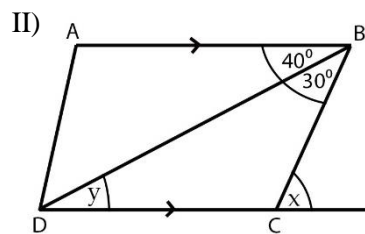
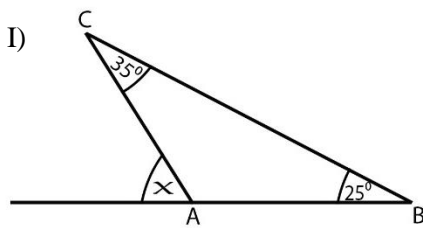
- I) Express the area of the square before removing the small square portion.
- II) Write an expression for the remaining area of the lamina. If $x = 2 \text{ cm}$ show that the remaining area of the lamina 156 cm^2 using the knowledge on factors.



Triangles

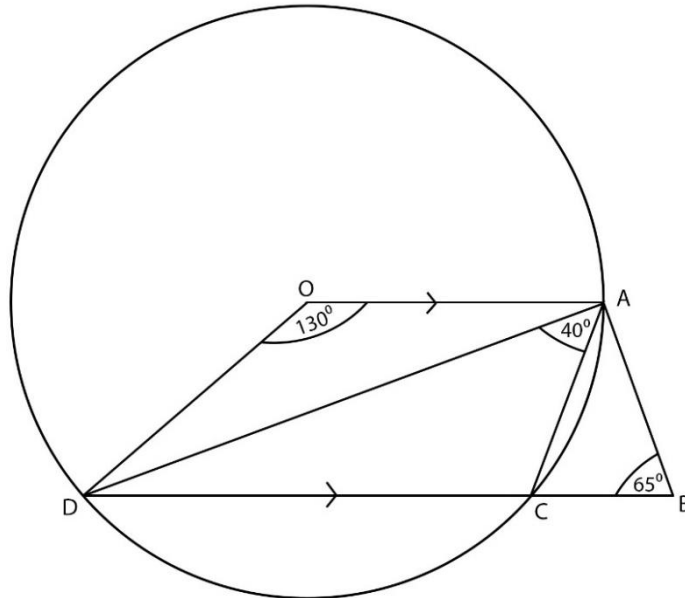
Exercise 2.1

1. Find the magnitudes of the angles represented by the letters in each of the figures.



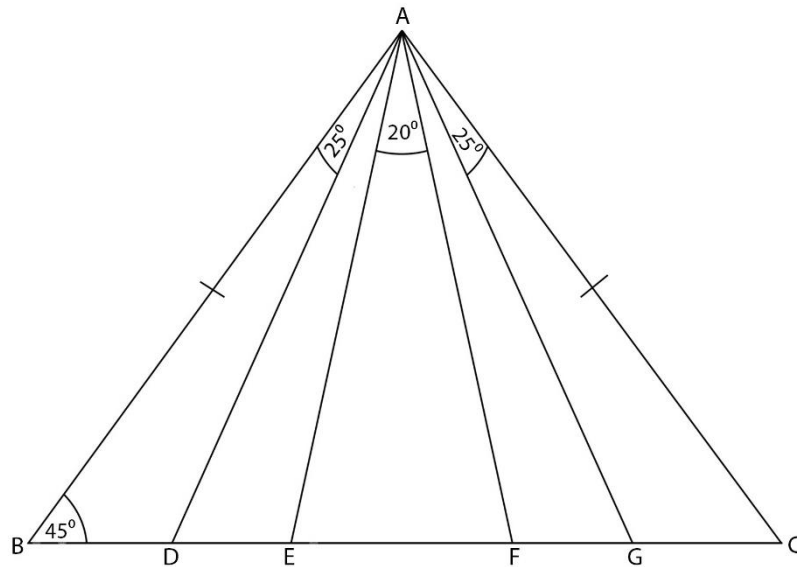
2. O is the center of the given circle. A, D and C are three points on the circle. If $OA \parallel DC$

- I) Find \widehat{ODA} .
- II) Find \widehat{ACB} .
- III) Show that ABC is an isosceles triangle.



3. ABC is an isosceles triangle. . If $AB = AC$ and $\widehat{DAE} = \widehat{FAG}$.

- I) Find \widehat{AEF} and \widehat{AFE} .
- II) What can you say about triangle AFE. Explain.



Inverse Proportions

Exercise 3.1

1. Write whether each of the following cases are direct proportions or inverse proportions.
 - a) Amount of pens and their total cost
 - b) Time taken to a vehicle to travel to a certain distance and its speed.
 - c) perimeter of a circle and its radius.
 - d) Time taken to complete a certain task and no of workers.
 - e) No of units (Reading in the electric meter) and the electric bill.
 - f) No of people and amount of water they consume.

Exercise 3.2

1. It takes 5 men 12 days to complete a certain task.
 - I) What is the magnitude of the task in man days?
 - II) How many days will it take one man to complete the same task?
 - III) How many days will it take 10 men to complete the same task?
2. In Indian ocean a ship called X-press Pearl caught fire. As estimated it would take 14 days for three boats to save the ship. After four days of Ari Lankan navy's attempt two Indian fire boats joined to complete the task. Show that the fire can be controlled before for days as predicted.
3. Six men take 8 days to complete a certain task by working 5 hours a day. The amount to be paid per person is Rs 800. To complete the same task by working 8 hours by 10 people required Rs 1200 per each.
 - I) If the task is completed by the first team what would be the total cost?
 - II) What is the most cost effective option?(first team or second team.)