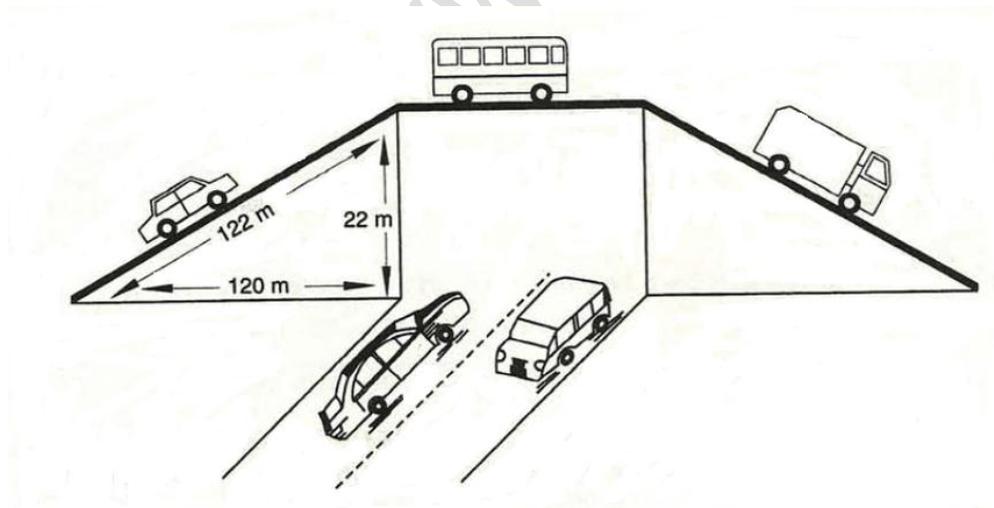


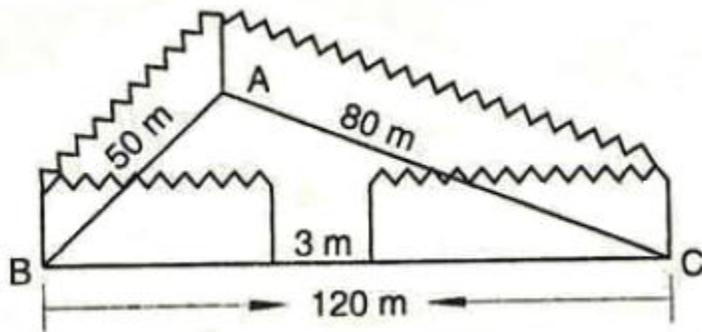
Chapter 12

- Q1. Find the area of a triangle whose side are 13 cm, 14 cm and 15 cm.
- Q2. Find the area of a triangle , two sides of which are 8 cm and 11 cm and the perimeter is 32 cm.
- Q3. An isosceles triangle has perimeter 30 cm and each of the equal sides is 12 cm. find the area of the triangle.
- Q4. The perimeter of a triangle field is 450 m and its sides are in the ration 13:12:5. Find the area of the triangle.
- Q5. Find the percentage increase in the area of a triangle if its each side is doubled.
- Q6. The length of the sides of a triangle are 5 cm , 12 cm and 13 cm. find the length of perpendicular from the opposite vertex to the side whose length is 13 cm.
- Q7. A traffic signal board , indicating “school ahead” is an equilateral triangle with side “a”. find the area of the signal board, using Heron’s formula. If its perimeter is 180 cm, what will be the area of the signal board.
- Q8. The triangle side walls of a flyover have been used for advertisements. The sides of the wall are 122 m, 22 m and 120 m. the advertisement yield on earning of Rs.5000 per m^2 per year. A company hired both wall for 3 months. How much rent did it pay?

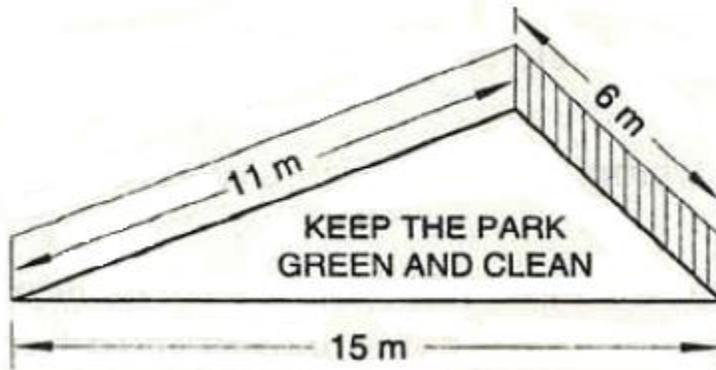


- Q9. A triangle park ABC has sides 120 m , 80 m and 50 m. a gardener Dhania has to put a fence all around it and also plant grass inside. How much area does she need to plant? Find the cost

of fencing it with barbed wire at the rate of Rs.20 per meter leaving a space 3 m wide for a gate on one side.



Q10. There is a slide in a park. One of its side walls has been painted in some colour with a message “KEEP THE PARK GREEN AND CLEAN” if the sides of the wall are 15 m, 11 m and 6 m, find the area painted in colour.

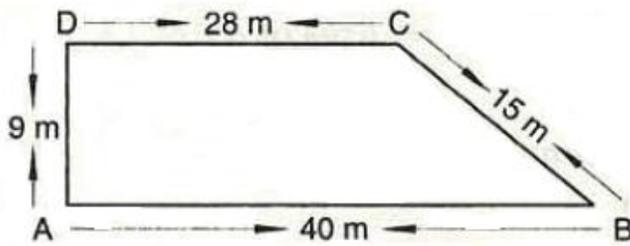


Q11. A triangle and a parallelogram have the same base and the same area. If the sides of the triangle are 26 cm, 28 cm and 30 cm, and the parallelogram stands on the base 28 cm, find the height of the parallelogram.

Q12. Find the area of a quadrilateral ABCD whose sides are 9 m, 40 m, 28 m and 15 m respectively and the angle between the first two sides is a right angle.

Q13. Find the area of the quadrilateral ABCD, in which AB=7 cm, BC= 6 cm, CD=12 cm, DA=15 cm and AC=9 cm.

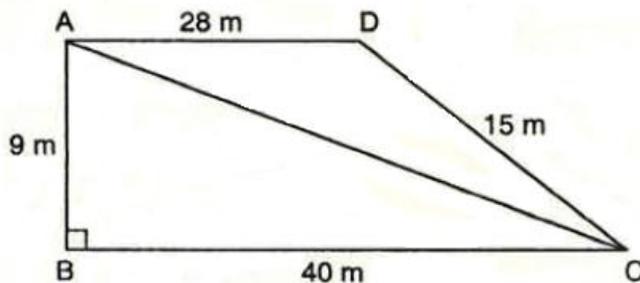
Q14. In figure, ABCD is a field in the form of a quadrilateral whose sides are indicated in the figure. If $\angle DAB = 90^\circ$, find the area of the field.



Q15. A field is in shape of a trapezium whose parallel sides are 25 m and 10 m. the non-parallel sides are 14 m and 13 m. find the area of the field.

Q16. Find the area of trapezium whose parallel sides 25 cm, 13 cm and other sides are 15 cm and 15 cm.

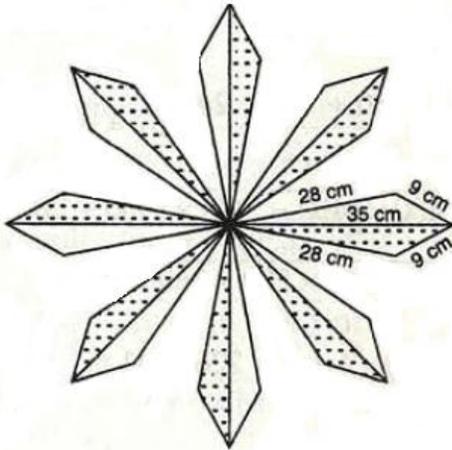
Q17. Students of a school staged a rally for cleanliness campaign. They walked through the lanes in two groups. One group walked through the lanes AB, BC and CA; while other through AC, CD and DA (see figure). Then they cleaned the area enclosed within their lanes. If $AB = 9\text{m}$, $BC = 40\text{m}$, $CD = 15\text{m}$, $DA = 28\text{m}$, and $\angle B = 90^\circ$. which group cleaned more area and by how much? find the total area cleaned by the students.



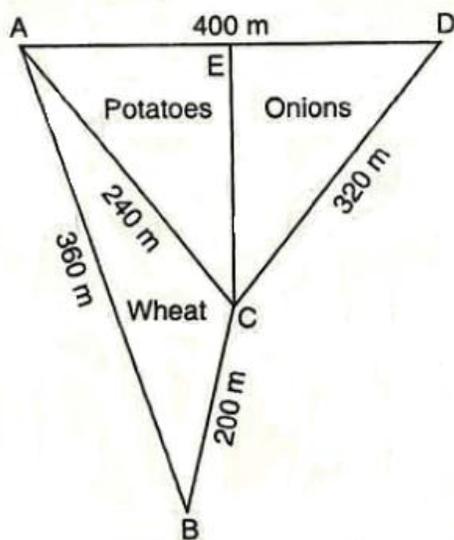
Q18. A rhombus shaped field has green grass for 18 cows to graze. If each side of the rhombus is 30 m and its longer diagonal is 48 m, how much area of grass field will each cow be grazing?

Q19. Sanya has a piece of land which is in the shape of a rhombus. She wants her one daughter and one son to work on the land and produce different crops to suffice the needs of the their family. She divided the land in two equal parts. If the perimeter of the land is 400 m and one of the diagonal is 160 m, how much area each of them will get?

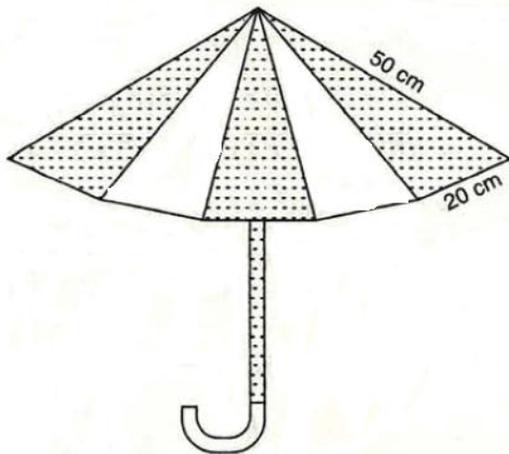
Q20. A floral design on a floor is made up to 16 tiles which are triangular, the sides of the triangle being 9 cm, 28 cm and 35 cm (see figure). Find the cost of polishing the tiles at the rate of 50 paise per cm^2 .



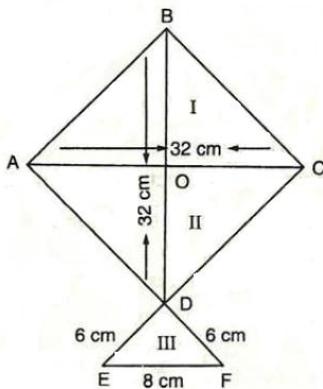
Q21. Kamala has a triangular field with sides 240 m, 200 m, 360 m, where she grew wheat. In another triangular field with sides 240 m, 320 m, 400 m adjacent to the previous field, she wanted to grow potatoes and onion as shown in figure. She divided the field in two parts by joining the mid –point of the longest side to the opposite vertex and grew potatoes in one part and onions in the other part. How much area (in hectares) has been used for wheat, potatoes and onions? (1 hectare= 10000 m²)



Q22. An umbrella is made by stitching 10 triangular piece of cloth of two different colours (see figure), each piece measuring 20 cm, 50 cm and 50 cm. how much cloth of each colour is required for the umbrella?



Q23. A kite in the shape of a square with a diagonal 32 cm and an isosceles triangle of base 8 cm and sides 6 cm each is to be made of three different shades as shown in figure. How much paper of each shade has been used in it?



Q24. Radha made a picture of an aeroplane with coloured paper as shown in figure, find the total area of the paper used.

