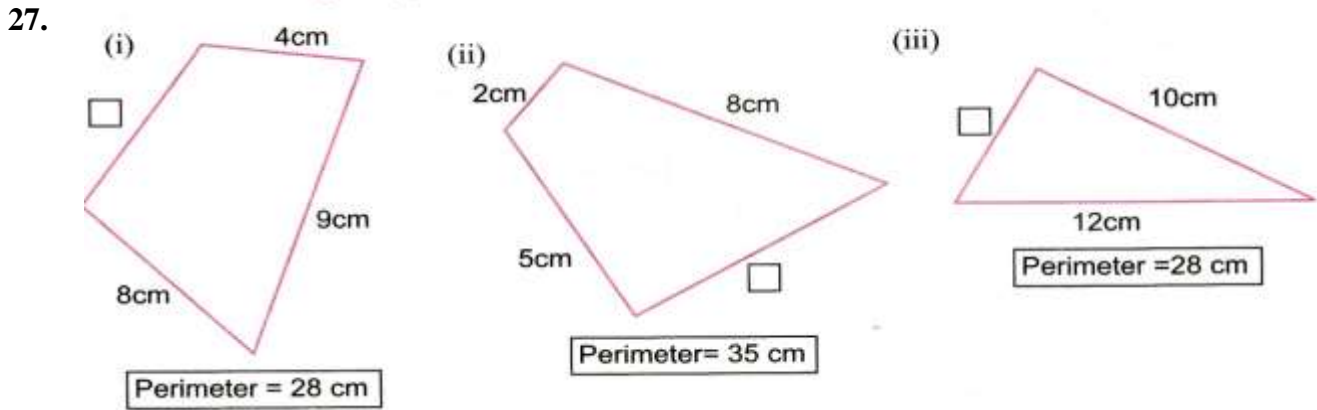


**NISCORT FATHER AGNEL SCHOOL,VAISHALI (2017-18)**  
**SELF LEARNING WORKSHEET**  
**CLASS-VI**  
**MENSURATION**

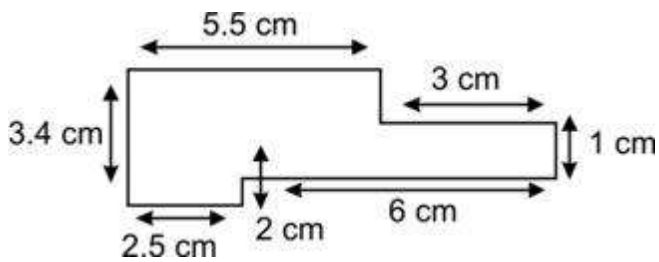
1. The perimeter of a rectangle is 230 cm. If the length of the rectangle is 70 cm, find its breadth and area.
2. The area of a rectangle is 96 cm<sup>2</sup>. If the breadth of the rectangle is 8 cm, find its length and perimeter.
3. How many tiles whose length and breadth are 13 cm and 7 cm respectively are needed to cover a rectangular region whose length and breadth are 520 cm and 140 cm?
4. Find the cost of tiling a rectangular plot of land 300 m long and 150 m wide at the rate of Rs.6 per hundred square m.
5. If it costs Rs.1600 to fence a rectangular park of length 20 m at the rate of Rs.25 per m<sup>2</sup>, find the breadth of the park and its perimeter. Also, find the area of the field.
6. The length of a rectangular wooden board is thrice its width. If the width of the board is 120 cm, find the cost of framing it at the rate of Rs.5 for 20 cm.
7. Find the perimeter of a square whose area is 625 cm<sup>2</sup>.
8. Find the area of the square whose perimeter is 440 cm.
9. How many square tiles of side 9 cm will be needed to fit in a square floor of a bathroom of side 720 cm. Find the cost of tiling at the rate of Rs.75 per tile.
10. The areas of a square and rectangle are equal. If the side of the square is 20 cm and the breadth of the rectangle 10 cm, find the length of the rectangle and its perimeter.
11. If it costs Rs.2400 to fence a square field at the rate of Rs.6 per m, find the length of the side and the area of the field. (Hint-Perimeter = (Total cost)/(Cost per m<sup>2</sup>) )
12. A wire in the shape of rectangle whose width is 22 cm is bent to form a square of side 31 cm. Find the length of the rectangle. Also, find which shape encloses more area.
13. The area of a square field is 81 hectares. Find the cost of fencing the field with a wire at the rate of Rs.2.25 per m.
14. A square piece of land has each side equal to 100m. If 3 layers of metal wire have to be used to fence it, what is the length of the wire needed?
15. Find the cost of fencing a rectangular park of length 175m and breadth 125m at the rate of Rs. 12 per metre.
16. The perimeter of a regular pentagon is 100 cm. How long is each side?
17. A rectangular piece of land measures 0.7 km by 0.5 km. Each side is to be fenced with four rows of wires. What is the length of the wire needed?
18. A rectangle has the area equal to that of a square of side 80cm. If the breadth of the rectangle is 20 cm, find its length.
19. Bholu and Raju bought one field each with dimensions 50m by 40m and 100m by 30m. They purchased the land at the rate of Rs. 500 per square metre. Who paid more and by how much?
20. Find the cost of levelling a playground at Rs. 5 per square metre if it is 28m long and 16m wide. Also, find the cost of fencing it at Rs. 2.40 per metre.
21. Sujit painted a wall of 45m by 30m and the money he got for his work was Rs.20 for per square m. How much money he made. He always gives half of his income to orphanage. Calculate how much money he gave to the orphanage. What value you learn from Sujit?
22. Veena wants to fix up a border on a quilt which is 2 m 50cm long and 1 m 30 m broad. Find the length of the border.

23. Find the perimeter of the rectangle whose breadth is 53.5 cm and its length is double of the breadth.
24. A rectangle has the area equal to that of a square of side 80cm. If the breadth of the rectangle is 20cm, find its length.
25. Six square flower beds each of side 1 m are dug on a piece of land 5 m long and 4 m wide. What is the area of the remaining part of land?
26. Pinky runs around a square field of side 75m, Bobby runs around a rectangular field with length 160m and breadth 105m. How much more distance covered by Bobby?

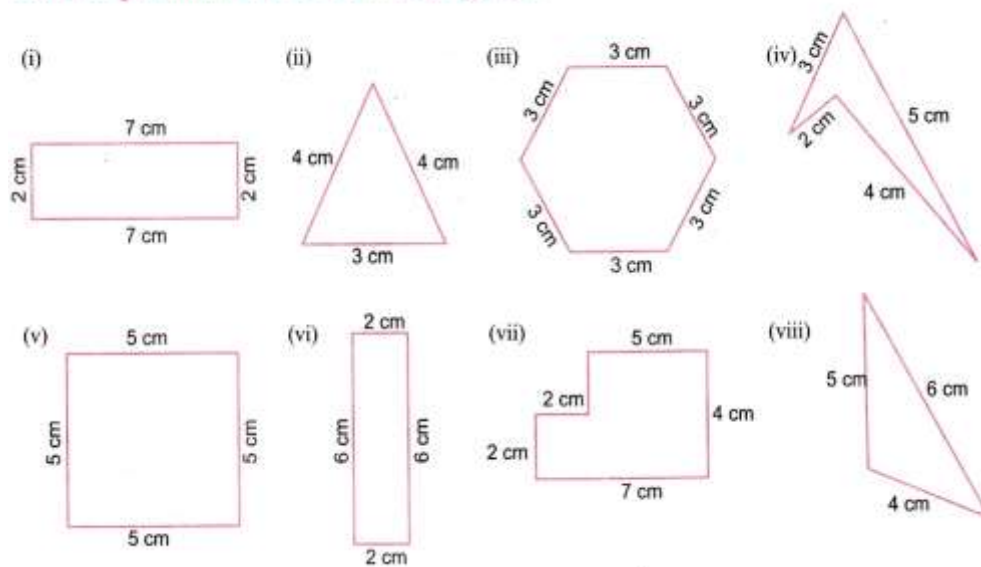
Find the missing lengths:



28. Find the area of figure.



29. Find the perimeter of the following figures:



**NISCORT FATHER AGNEL SCHOOL, VAISHALI (2017-18)**  
**SELF LEARNING WORKSHEET**  
**CLASS-VI**  
**PRACTICAL GEOMETRY**

1. Draw XY of length 8.3cm and find its axis of symmetry.
2. Draw a line segment of length 10.5cm and construct its perpendicular bisector.
3. With AB of length 6.2cm as diameter, draw a circle.
4. Draw a circle of radius 4.5cm. Draw any two of its chords. Construct the perpendicular bisectors of these chords. Where do they meet?
5. Draw a line segment of length 10.8cm. Using compasses, divide it into four equal parts . Verify by actual measurement.
6. Draw an angle of measure  $137^{\circ}$  and construct its bisector.
7. Draw a right angle and construct its bisector.
8. Draw an angle of measure  $152^{\circ}$  and divide into four equal parts
9. Draw an angle of measure  $60^{\circ}$  and bisect it.
10. Draw an angle of measure  $150^{\circ}$  and bisect it.
11. Construct with ruler and compasses, angles of following measures.  
a)  $60^{\circ}$  b)  $120^{\circ}$  c)  $90^{\circ}$  d)  $45^{\circ}$  e)  $15^{\circ}$  f)  $30^{\circ}$

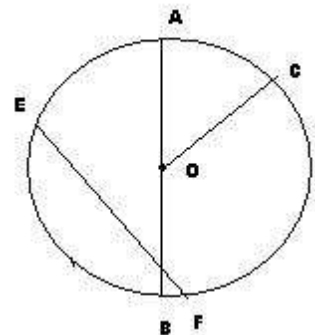
12. Draw a circle and any two of its diameter. What is the figure obtained? What figure is obtained if the diameter are perpendicular to each other?

13. Fill in the blanks:-

- a) A chord of a circle is a line segment with its end points \_\_\_\_\_.
- b) A radius of a circle is a line segment with one end at \_\_\_\_\_ and the other end \_\_\_\_\_ .
- c) A diameter of a circle is the \_\_\_\_\_ chord of the circle.
- d) A diameter of a circle is a chord that \_\_\_\_\_ through the centre.
- e) A chord of a circle divide the circle into two parts where each part is called an \_\_\_\_\_ of the circle.
- f) Circles which have the same centre and different radii are called \_\_\_\_\_ circles.

14. Refer to the figure given below and answer the following:

- (a) Name any diameter of the circle.
- (b) Name any radius of the circle.
- (c) Name the chord of the circle.
- (d) What is the centre of the given circle?



15. Given **AB** = 3cm and **CD** = 4cm, construct a line segment **XY** equal to sum of **AB** and **CD**.

16. Given **AB**= 7.2 cm and **CD**=2.9 cm. Construct a line segment whose length is equal to:-

- a) **AB**-**CD**    b) **AB** + **CD**    c) 2 **CD**    d) **AB**-2**CD**

17. Draw a circle with centre C and radius 3.4 cm. Draw any chord AB. Construct the perpendicular bisector of AB and examine if it passes through C.