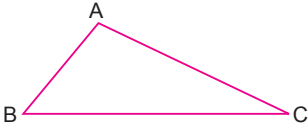
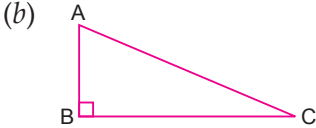
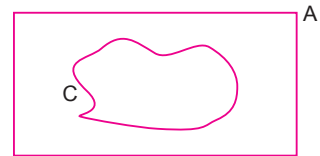


CHAPTER 10

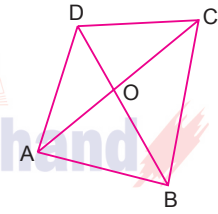
BASIC GEOMETRICAL IDEAS

More Questions for Practice

1. Mark any four points on a page of your exercise book and name them.
2. Draw a line on a sheet of paper and name it by using a small letter of the alphabet. Draw another line and name it by taking any two points on it.
3. Mark any two points on a piece of paper and draw a line passing through them. How many lines can you draw through each of these points?
4. Give two examples of (a portion of) planes from your environment.
5. Draw a picture of:
(a) a line; (b) a line segment; (c) a ray.
6. Draw two rays with the same end point.
7. Mark three points X, Y and Z in the exterior of the curve C.
8. Mark four points P, Q, R and S on the curve C.
9. Draw a closed curve and an open curve.
10. Sketch an angle—
(a) with vertex O and arms \overrightarrow{OA} and \overrightarrow{OB} .
(b) with vertex P and arms \overrightarrow{PQ} and \overrightarrow{PR} .
11. Sketch an angle XYZ. Mark any two points each in its interior and exterior.
12. Draw a median AD and an altitude AX in each of the following triangles:
(a)  (b) 
13. Draw a quadrilateral MNPR. Write its
(a) one pair of opposite sides;
(b) one pair of opposite vertices;
(c) one pair of adjacent sides;
(d) one pair of adjacent vertices.
14. Fill in the blanks:
(a) A curve which does not begin and end at the same points is called an _____ curve.
(b) A simple closed figure bounded by straight lines is said to have _____ boundaries.
(c) A triangle has _____ medians; and _____ altitudes.
(d) The length of diameter = _____ \times length of radius.
(e) The _____ of a circle always lies in the _____ of the circle.

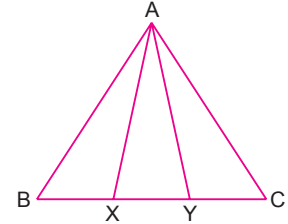


15. State *true* (T) or *false* (F) for each of the following:
- AC and BD are diagonals of the quadrilateral.
 - A, B, C and D are the interior points of the quadrilateral.
 - O is the interior point of the quadrilateral ABCD.
 - The two diagonals of a square are equal.
 - A circle with radius 6 cm has a diameter of length 3 cm.



16. Draw a circle. Mark its (a) centre O, (b) chord XY, (c) radius OA, (d) diameter PQ and (e) arc XZY.

17. How many triangles are there in the figure? Name all the triangles.



18. Draw three rays with the same end point. How many angles are formed? Name the angles.

ANSWERS

3. Infinite number of lines
14. (a) open (b) linear (c) three; three (d) 2 (e) centre, interior
15. (a) T (b) F (c) T (d) T (e) F
17. Six; $\triangle ABC$, $\triangle ABX$, $\triangle AXY$, $\triangle AYC$, $\triangle ABY$, $\triangle AXC$.
18. Three.