MATHS

BOOKS - MBD

PRACTICAL GEOMETRY

Example

1. Draw a circle of radius 3.2 cm.

Watch Video Solution

2. With the same centre O ,draw two circles of radii 4 cm and 2.5 cm.

Watch Video Solution

3. Draw a circle and any two of its diameter.If you join the ends of thes diameters,what is the figure obtained?What figure is obtained if the diameters are perpendicular to each others?How do you check your answer?

Watch Video Solution

4. Draw any circle and mark points A,B and C such that

A is on the circle. B is in the interior of circle.C is in the exterior of circle.

Watch Video Solution

5. Draw any circle and mark points A,B and C such that

B is in the interior of the circle.

Watch Video Solution

6. Draw any circle and mark points A,B and C such that

C is the exterior of the circle.

Watch Video Solution

7. Let A,B be the centres of two circles of equal radii,draw them so that each one of them passes through the centre of the other.Let

them intersect at C and D.Examine therther $\overline{A}B$ and $\overline{C}D$ are at right angles.

Watch Video Solution

8. Given $\overline{A}B$ of length 3.9 cm, construct $\overline{P}Q$ such that the length of $\overline{P}Q$ is twice that of $\overline{A}B$.Verify by measurement.

Watch Video Solution

9. Given $\overline{A}B$ of length 7.3 cm and $\overline{C}D$ of length of 3.4 cm,, construct $\overline{X}Y$ such that the length of $\overline{X}Y$ is twice that of $\overline{A}B$ and $\overline{C}D$ .Verify by measurement.

Watch Video Solution

10. Draw any line segment $\overline{P}Q$.Without measuring $\overline{P}Q$,construct a copy of $\overline{P}Q$.

Watch Video Solution

11. Given same line segment $\overline{AB}$,whoe length is not known.Construct $\overline{PQ}$ such that the length of $\overline{PQ}$ is twice that of $\overline{AB}$.

Watch Video Solution

12. Draw any line segment $\overline{AB}$.Mark any piont M on it.Through M draw a perpendicular to $\overline{AB}$.(use ruler and compass).

Watch Video Solution

13. Draw any line segment $\overline{P}Q$ .Take any point R not on it.Through R draw a perpendicular to $\overline{P}Q$.

Watch Video Solution

14. Draw a line l and a pont x on it.Threough x ,draw a line segment $\overline{X}Y$ perpendicular to l. NOw draw a perpendicular to $\overline{X}Y$ at Y,

Watch Video Solution

15. Draw $\overline{AB}$ of length 7.3 cm and find its axis of symmetry.

Watch Video Solution

16. Draw a ilne segment of length 9.5 cm and construct its perpendicular bisector.

Watch Video Solution

17. Draw the perpendicular bisector of $\overline{XY}$ whose length is 10.3 cm

Take any point P on the bisector drawn.Examine whether PX=PY.

Watch Video Solution

18. If M is the mid point of XY,what can you say about the lengths MX and XY?

Watch Video Solution

19. Draw a line segment of length 11.4 cm, using a ruler.

20. With PQ of length 6.1 cm as diameter,draw a circle.

21. Draw a circle with centre C and radius 3.4 cm.Draw any chord $\overline{A}B$.Construct the perpendicular bisector of $\overline{A}B$ and examine if it passes through C.

Watch Video Solution

22. Repeat Qestiobn 6,if $\overline{A}B$ happens to be a diameter.

Watch Video Solution

23. Draw a circle of radius 4 cm.Draw any two of its chords.Construct the perpendicular bisectors of these chords.Where do they meet?

Watch Video Solution

24. Draw any angle with vertex O .Take a pont A on one of its arms and B on any another such that OA=OB.Draw the perpendicular bisectors of $\overline{O}A$ and $\overline{O}B$.Let them meet at P.Is PA=PB?

Watch Video Solution

25. Draw $\angle(POQ)$ of measure 75° and find its line of symetery.

Watch Video Solution

26. Draw an angle of measure 147° and construct its bbisector.

Watch Video Solution

27. Draw a right angle and construct its bisector.

Watch Video Solution

28. Draw an angle of measure 153° and divide it into four equal parts.

Watch Video Solution

29. Construct with ruler and compass angles of following meaures:

60°

Watch Video Solution

30. Construct the angles of the following measurement 30°.

Watch Video Solution

31. Construct with ruler and compass angles of following meaures:

90°

Watch Video Solution

32. Construct with ruler and compass angles of following meaures:

120°

Watch Video Solution

33. Construct with ruler and compass angles of following meaures:

45°

Watch Video Solution

34. Construct with ruler and compass angles of following meaures:

135°.

Watch Video Solution

35. Draw an angle of measure 45° and bisect it.

Watch Video Solution

36. Draw an angle of measure 135° and bisect it.

Watch Video Solution

37. Draw an angle of 70°

Watch Video Solution

38. Draw an angle of 40°.Copy its supplementary angle.

Watch Video Solution

Exercise

1. Draw a circle of radius 4 cm.

Watch Video Solution

2. Draw a line segment of length 7.3 cm using a ruler.

Watch Video Solution

3. Construct a line segment of length 5.6 cm using ruler and compasses.

Watch Video Solution

4. Construct $\overline{A}B$ of length 7.8 cm .From this cut off $\overline{A}C$ of length 4.7 cm.Measure $\overline{B}C$.

Watch Video Solution

5. Draw a line segment of length 11.4 cm, using a ruler.

Watch Video Solution

6. Construct the line segments of the following lengths ,using compasses:

6.4 cm

Watch Video Solution

7. Construct the line segments of the following lengths ,using compasses:

4.7 cm

Watch Video Solution

8. If AB = 4.5 cm and CD = 3 cm .Construct a line segment whose length is equal to

2 AB

Watch Video Solution

9. If AB = 4.5 cm and CD = 3 cm .Construct a line segment whose length is equal to

3CD

Watch Video Solution

10. If AB = 4.5 cm and CD = 3 cm .Construct a line segment whose length is equal to AB+2CD

Watch Video Solution

11. If AB = 4.5 cm and CD = 3 cm .Construct a line segment whose length is equal to AB-CD

Watch Video Solution

12. If AB = 4.5 cm and CD = 3 cm .Construct a line segment whose length is equal to 2 CD-AB.

 Watch Video Solution

13. Given AB=5.8 cm and CD = 2.5 cm,construct a line segment whose length is equal to the difference of lengths of line segments AB and CD.

 Watch Video Solution

14. Draw any line segment $\overline{AB}$ without measuring $\overline{AB}$ consturct a copy of $\overline{AB}$.

Watch Video Solution

15. Given $\overline{AB}$ a line segment whose length = 5 cm,construct $\overline{PQ}$ such that the length of $\overline{PQ}$ is twice that of $\overline{AB}$.

Watch Video Solution

16. Draw a lineAB.Mark a point C on it.Draw a line CD perpendicular to AB, using ruler and compasses.

Watch Video Solution

17. Draw a line segment AB of length 7 cm.Mark a point P on AB such that AP=2 cm.Draw a line through P perpendicular to the line segment AB.

Watch Video Solution

18. Draw a line l ,also draw a line m parallel to l at a distance of 4 cm.

Watch Video Solution

19. Draw a line AB.Take a point C outside it .Through C draw a line parallel to AB,using ruler and compass.

Watch Video Solution

20. Draw $\overline{PQ}$ of length 5.9 cm and find its axis symmetry.

Watch Video Solution

21. Draw a line segment of length 5cm.Construct the perpendicular bisector of this line segment.

Watch Video Solution

22. Draw a circle of any radius.Draw its two chords such that AB is parallel to Cd.Draw the Perpendicular bisector of line segment AB and CD.

Watch Video Solution

23. Draw a line segment Ab and obtain a line segment of length

$\frac{1}{4}AB$

Watch Video Solution

24. If A and B are (- 2,- 2) and (2,- 4) respectively, find the coordinates of P such that AP=3/4 AB`. AB and P lies in the line segment AB

Watch Video Solution

25. With $\overline{A}B$ of length 3.4 cm as diameter draw a circle.

Watch Video Solution

26. Draw $\angle(AOB)$ of measure 15°

Watch Video Solution

27. Draw an angle of measure 150° and construct its bisector.

Watch Video Solution

28. Draw an acute angle i.e. 60° and construct its bisector.

Watch Video Solution

29. Construct with ruler and compass angles of following measures:

75°

Watch Video Solution

30. Construct with ruler and compass angles of following measures:

75°

Watch Video Solution

31. Construct the angles of the following measurement $22\frac{1_{\circ}}{2}$.

Watch Video Solution

32. Draw an angle of measure 45° and bisect it.

Watch Video Solution