14. Practical Geometry

Question 1.
Number of lines which can be drawn from one point.
(a) infinite
(b) 1
(c) 2
(d) None of these

Answer: (a) infinite

Question 2.
How many arcs are required to be drawn to construct an angle of 60°.
(a) one
(b) two
(c) three
(d) four

Answer: (b) two

Question 3.
Which geometrical instrument used to mark off equal lengths but not to measure them and draw arcs and circles?
(a) Compasses
(b) Set squares
(c) Divider
(d) Protractor

Answer: (a) Compasses

Question 4.
How do you draw a 90° angle?
(a) By drawing a perpendicular to a line from a point lying on it.
(b) By bisecting a 120° angle.
(c) By bisecting a 60° angle.
(d) By drawing multiples of 45° angle.

Answer: (a) By drawing a perpendicular to a line from a point lying on it.

Question 5.
What are minimum number of perpendiculars to be constructed to construct a square.
(a) one
(b) two
(c) three
(d) four

Answer: (b) two

Question 6.
If the diameter of a circle is 22 cm, then the radius of the circle is _____.
(a) 5.5 cm
(b) 11 cm
(c) 4.5 cm
(d) None of these

Answer: (b) 11 cm

Question 7.
How many arcs are to be drawn to construct an angle of 90°.
(a) one
(b) three
(c) five
(d) seven

Answer: (c) five

Question 8.
A _____ is a simple closed curve all of whose points are at the same distance from a fixed point.
(a) diameter
(b) radius
(c) triangle
(d) circle

Answer: (d) circle

Question 9.
The line segment forming a polygon is called _____.
(a) angle
(b) side
(c) vertex
(d) None of these

Answer: (b) side

Question 10.
How many circles can be drawn through one given point.
(a) one
(b) two
(c) three
(d) Infinite number of circles

Answer: (d) Infinite number of circles

Question 11.
Number of circles passing through a given point are _____.
(a) 1
(b) 2
(c) 3
(d) infinite

Answer: (d) infinite

Question 12.
Which instrument is used to draw arcs and circles.
(a) compass
(b) protractor
(c) scale
(d) set square

Answer: (a) compass

Question 13.
Name the geometrical instrument having a semi-circular device graduated into 180 degree-parts.
(a) Divider
(b) Compasses
(c) Set squares
(d) Protractor

Answer: (d) Protractor

Question 14.
How many perpendicular bisectors are required to be constructed to divide a line segment in four parts.
(a) one
(b) two
(c) three
(d) four

Answer: (c) three

Question 15.
Into what type of parts is a figure divided by bisecting it?
(a) Unequal
(b) Equal
(c) Triangular
(d) Perpendicular

Answer: (b) Equal

Question 16.
Name the geometrical instrument having a pair of pointers.

(a) Set squares
(b) Divider
(c) Protractor
(d) Compasses

Answer: (b) Divider

Question 17.
How many circles can be drawn through two given points.
(a) one
(b) two
(c) three
(d) four

Answer: (a) one

Question 18.
A few lines in a plane have a point in common. What type of lines can they be?
(a) Intersecting lines
(b) Parallel lines
(c) Concurrent lines
(d) Either (a) or (c)

Answer: (d) Either (a) or (c)

Question 19.
If the radius of a circle is 7 cm, then the diameter of the circle is _____.
(a) 10 cm
(b) 14 cm
(c) 3.5 cm
(d) None of these

Answer: (b) 14 cm

Question 20.
If the diameter of a circle is 20 cm, then the radius of the circle is _____.
(a) 10 cm
(b) 5 cm
(c) 2.5 cm
(d) None of these

Answer: (a) 10 cm

Question 21.
Which instrument is used to draw angles.
(a) Scale
(b) Compass
(c) protractor
(d) Divider

Answer: (c) protractor

Question 22.
If the radius of a circle is 3 cm, then the diameter of the circle is _____.
(a) 1.5 cm
(b) 3 cm
(c) 6 cm
(d) None of these

Answer: (c) 6 cm

Question 23.
If the radius of a circle is 7.5 cm, then the diameter of the circle is _____.
(a) 15 cm
(b) 7.5 cm
(c) 12 cm
(d) None of these

Answer: (a) 15 cm

Question 24.
What is the equal distance of a point from the its centre called.
(a) Diameter
(b) Radius
(c) Chord
(d) None of these

Answer: (a) Diameter

Question 25.
What do you call two lines intersecting at a point?
(a) Perpendicular lines
(b) Parallel lines
(c) Bisectors lines
(d) Intersecting lines

Answer: (d) Intersecting lines

Question 26.
How many perpendicular bisectors are required to trisect a line segment.
(a) one
(b) two
(c) three
(d) None of these

Answer: (b) two

Question 27.
A maths teacher asked his students to draw a pair of parallel lines. Which instrument(s) are the students most likely to use?
(a) A ruler and a compass
(b) Two edges of a ruler
(c) A ruler and a setsquare
(d) Both (b) and (c)

Answer: (d) Both (b) and (c)

Question 28.
If the radius of a circle is 5 cm, then the diameter of the circle is _____.
(a) 10 cm
(b) 12 cm
(c) 2.5 cm
(d) None of these

Answer: (a) 10 cm

Question 29.
Which of the following is done to draw an angle of 150° using compasses and a ruler?
(a) Bisecting 120° and 180° angles.
(b) Bisecting 60° and 120° angles.
(c) Bisecting 0° and 60° angles.
(d) Bisecting a 360° angle.

Answer: (a) Bisecting 120° and 180° angles.

Question 30.
Which geometrical instrument used to compare lengths?
(a) Divider
(b) Protractor
(c) Compasses
(d) Set squares

Answer: (c) Compasses

Question 31.
For which of the following are the rails of a railway line an example?
(a) Parallel lines
(b) Intersecting lines
(c) Perpendicular lines
(d) Coplanar lines

Answer: (a) Parallel lines

Question 32.
Two lines are said to be perpendicular to each other when they meet at _____ angle.
(a) 180°

(b) 90°
(c) 60°
(d) 360°

Answer: (b) 90°

Question 33.
Which geometrical instrument used to draw line segments and to measure their lengths?
(a) Divider
(b) Compasses
(c) Set squares
(d) Ruler

Answer: (d) Ruler

Question 34.
If the diameter of a circle is 14 cm, then the radius of the circle is _____.
(a) 7 cm
(b) 4.5 cm
(c) 3.5 cm
(d) None of these

Answer: (a) 7 cm

Question 35.
Name the geometrical instrument having two triangular pieces.
(a) Compasses
(b) Set squares
(c) Protractor
(d) Divider

Answer: (b) Set squares

Fill in the blanks:

1. Instrument used to draw circles is called …………….

Answer: compass

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2. ……………. perpendicular bisectors are required to trisect a line segment.

Answer: two

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3. Instrument used to measure an angle is known as …………..

Answer: protractor

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4. A line segment is bounded by ………….. end points.

Answer: two

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5. ………….. circles can be drawn through three non-collinear points

Answer: one

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6. …………………….circles can be drawn from four scattered points

Answer: no circle

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7. ……………. circles can be drawn from one given point

Answer: infinite

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8. Instrument used to compare lengths is called ……………….

Answer: divider

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9. Angle bisector of an angle divides the angle in ……………. equal parts.

Answer: two

Match the following:

1.

(a) Measurement of length	(i) One circle can be drawn
(b) Measure an angle	(ii) Infinite no. of circles can be drawn.
(c) From one given point	(iii) Set squares
(d) From two given points	(iv) Scale
(e) From three collinear points	(v) protractor
(f) Two drawn perpendicular and	(vi) No cirlces can be drawn

Answer:

(a) Measurement of length	(iv) Scale
(b) Measure an angle	(v) protractor
(c) From one given point	(ii) Infinite no. of circles can be drawn.
(d) From two given points	(i) One circle can be drawn
(e) From three collinear points	(vi) No cirlces can be drawn
(f) Two drawn perpendicular and	(iii) Set squares