EduSahara™ Assignment

Name : Circle Basics

Chapter : Circles

Grade : CBSE Grade X

1. The mid-point of the diameter of a circle is called

   (i) radius (ii) chord (iii) semi-circle (iv) major segment (v) centre

2. A line segment joining any point on the circle with its centre is called

   (i) radius (ii) chord (iii) semi-circle (iv) circumference (v) centre

3. A line segment having its end points on the circle is called a

   (i) segment (ii) circumference (iii) chord (iv) radius (v) semi-circle

4. A chord that passes through the centre of the circle is called

   (i) diameter (ii) chord (iii) circumference (iv) major segment (v) radius

5. A chord of a circle divides the whole circular region into two parts, each called a

   (i) centre (ii) major segment (iii) circumference (iv) segment (v) diameter

6. The segment of the circle containing the centre of the circle is called

   (i) diameter (ii) major segment (iii) chord (iv) circumference (v) radius

7. Half of a circle is called

   (i) diameter (ii) centre (iii) chord (iv) radius (v) semi-circle

8. The perimeter of a circle is called

   (i) segment (ii) semi-circle (iii) chord (iv) major segment (v) circumference

9. Which of the following statements are true?

   a) A circle consists of an infinite number of points.
   b) Every circle has a unique diameter.
   c) A line can meet a circle atmost at two points.
   d) Every circle has a unique centre.
   e) Each radius of a circle is also a chord of the circle.

   (i) {b,a,c} (ii) {b,a} (iii) {a,c,d} (iv) {b,e,d} (v) {e,c}

10. Which of the following statements are true?

    a) Every circle has a unique diameter.
    b) One and only one tangent can be drawn to a circle from a point outside it.
    c) An infinite number of chords may be drawn for a circle.
    d) An infinite number of diameters may be drawn for a circle.
    e) Two semi-circles of a circle together make the whole circle.

    (i) {a,b,e} (ii) {a,c,d} (iii) {b,d} (iv) {a,c} (v) {c,d,e}

11. Which of the following statements are true?

a) One and only one tangent can be drawn to a circle from a point outside it.
b) One and only one tangent can be drawn to pass through a point on a circle.
c) A secant of a circle is a segment having its end points on the circle.
d) Every circle has a unique diameter.
e) Diameter of a circle is a part of the semi-circle of the circle.

(i) {c,e} (ii) {d,a,b} (iii) {a,b} (iv) {b,e} (v) {c,e,b}

12. Two circles with radii R and r touch internally. If the distance between their centres is d, then

(i) $d = R + r$ (ii) $d = R - r$ (iii) $d > R - r$ (iv) $d < R - r$ (v) $d < R + r$

13. Two circles with equal radii are

(i) only similar but not congruent (ii) not similar (iii) congruent (iv) concentric

14. The angle between a tangent to a circle and the radius drawn at the point of contact is

(i) 105° (ii) 100° (iii) 120° (iv) 95° (v) 90°

15. If two circles of radii 11 cm and 3 cm touch internally, the distance between their centres is

(i) 10 cm (ii) 6 cm (iii) 7 cm (iv) 9 cm (v) 8 cm

16. If two circles of radii 13 cm and 7 cm touch externally, the distance between their centres is

(i) 22 cm (ii) 18 cm (iii) 20 cm (iv) 21 cm (v) 19 cm

17. A line which intersects the circle at two distinct points is called a

(i) segment (ii) tangent (iii) secant (iv) diameter (v) circumference

18. A line which touches a circle at only one point is called a

(i) major segment (ii) circumference (iii) semi-circle (iv) secant (v) tangent

19. If the two radii OP and OQ of a circle are at right angles to each other, then the sector OPQ is called a

(i) tangent (ii) major segment (iii) radius (iv) circumference (v) quadrant

20. Which of the following statements are true?

a) A chord divides a circle into two sectors.
b) The radius is the shortest chord.
c) A chord divides a circle into two segments.
d) Atmost one chord can be drawn on a circle with a certain length.
e) The diameter is the longest chord.

(i) {d,a,c} (ii) {c,e} (iii) {b,e} (iv) {b,e,c} (v) {a,c}

21. Which of the following statements are true?

a) Equal length chords are equidistant from the centre of the circle.
b) No two chords bisects each other.
c) The farther the chord is from the centre, the larger the angle it subtends at the centre.
d) The longest chord of the circle passes through the centre of the circle.
e) Equal length chords subtend equal angles at the centre of the circle.

(i) {b,a,d} (ii) {b,c,e} (iii) {b,a} (iv) {a,d,e} (v) {c,d}

22. The point of intersection of the angular bisectors of a triangle is

(i) orthocentre (ii) excentre (iii) centroid (iv) circumcentre (v) incentre

23. The angle subtended by the semicircle at the centre is

(i) 190° (ii) 210° (iii) 180° (iv) 185° (v) 195°

24. The angle subtended by the diameter at any point on the circle is

(i) 100° (ii) 105° (iii) 90° (iv) 120° (v) 95°

25. Circles having common centre are called

(i) intersecting circles (ii) concentric circles (iii) similar circles (iv) congruent circles

26. If two circles are concentric, then

(i) their diameters are same (ii) their radii are same (iii) their centres are same

(iv) their perimeters are same

27. Which of the following figures represent a chord ?

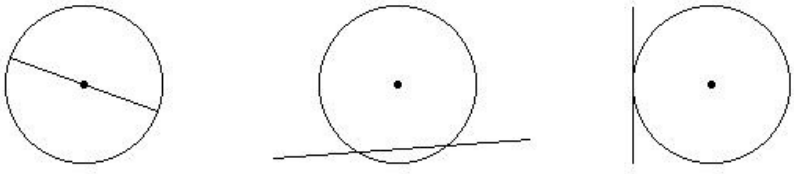

fig I fig II fig III

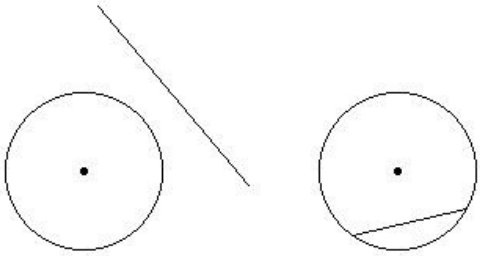

fig IV fig V

(i) fig III (ii) fig II (iii) fig V (iv) fig I (v) fig IV

28. Which of the following figures represent a diameter ?

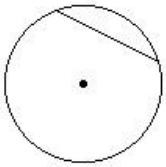

fig I

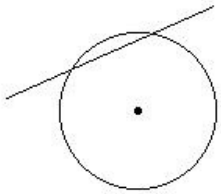

fig II

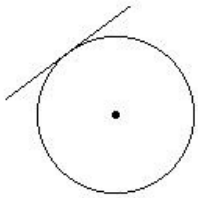

fig III

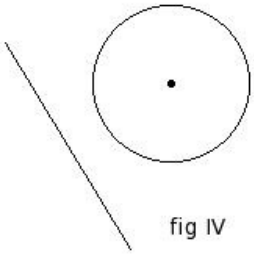

fig IV

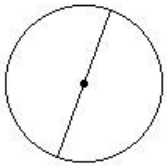

fig V

(i) fig I (ii) fig V (iii) fig IV (iv) fig II (v) fig III

29. Which of the following figures represent a secant ?

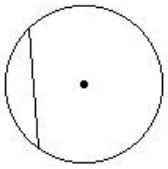

fig I

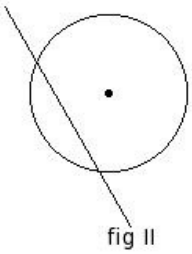

fig II

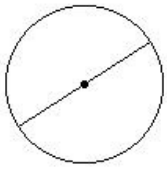

fig III

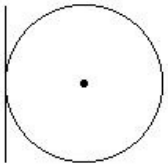

fig IV

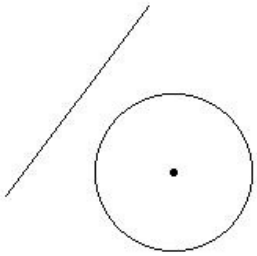

fig V

(i) fig I (ii) fig III (iii) fig V (iv) fig IV (v) fig II

30. Which of the following figures represent a tangent ?

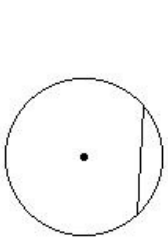

fig I

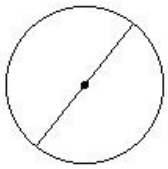

fig II

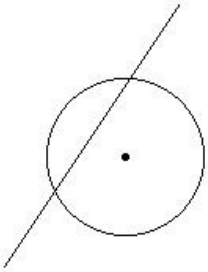

fig III

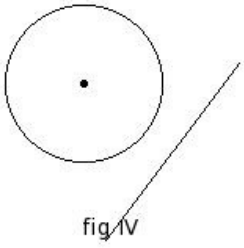

fig IV

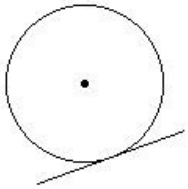

fig V

(i) fig III (ii) fig V (iii) fig I (iv) fig IV (v) fig II

31. Which of the following statements are true?

a) A circle divides the plane into three mutually disjoint sets of points.
b) All diameters of a circle are chords.
c) $\frac{22}{7}$ is a rational number.
d) All chords of a circle are diameters.
e) π is a rational number.

(i) {d,a,b} (ii) {d,a} (iii) {e,b} (iv) {d,e,c} (v) {a,b,c}

32. Points which lie on the circumference of the circle are called

(i) Similar points (ii) Coincident points (iii) Cyclic points (iv) Concyclic points (v) Concurrent points

Assignment Key

1) (v)	2) (i)	3) (iii)	4) (i)	5) (iv)	6) (ii)
7) (v)	8) (v)	9) (iii)	10) (v)	11) (iv)	12) (ii)
13) (iii)	14) (v)	15) (v)	16) (iii)	17) (iii)	18) (v)
19) (v)	20) (ii)	21) (iv)	22) (v)	23) (iii)	24) (iii)
25) (ii)	26) (iii)	27) (iii)	28) (ii)	29) (v)	30) (ii)
31) (v)	32) (iv)				