EduSahara™ Assignment

Name : Circle Basics

Chapter : Circles

Grade : CBSE Grade X

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

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

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

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

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

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

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

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

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

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

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

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

7. Half of a circle is called

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

8. The perimeter of a circle is called

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

9. Which of the following statements are true?

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

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

10. Which of the following statements are true?

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

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

11. Which of the following statements are true?

a) Diameter of a circle is a part of the semi-circle of the circle.
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) One and only one tangent can be drawn to a circle from a point outside it.

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

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) congruent (ii) only similar but not congruent (iii) not similar (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) 95° (iv) 120° (v) 90°

15. If two circles of radii 12 cm and 5 cm touch internally, the distance between their centres is

(i) 5 cm (ii) 9 cm (iii) 6 cm (iv) 7 cm (v) 8 cm

16. If two circles of radii 10 cm and 7 cm touch externally, the distance between their centres is

(i) 15 cm (ii) 16 cm (iii) 19 cm (iv) 18 cm (v) 17 cm

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

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

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

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

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) chord (ii) quadrant (iii) diameter (iv) major segment (v) centre

20. Which of the following statements are true?

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

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

21. Which of the following statements are true?

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

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

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

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

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

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

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

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

25. Circles having common centre are called

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

26. If two circles are concentric, then

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

(iv) their diameters are same

27. Which of the following figures represent a chord ?

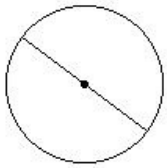

fig I

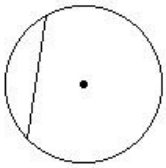

fig II

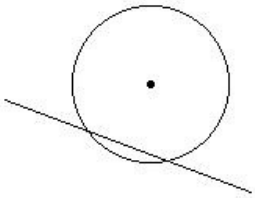

fig III

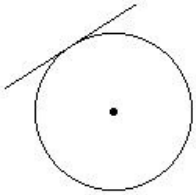

fig IV

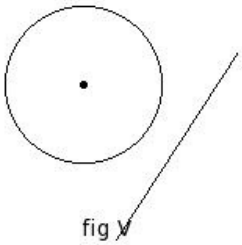

fig V

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

28. Which of the following figures represent a diameter ?

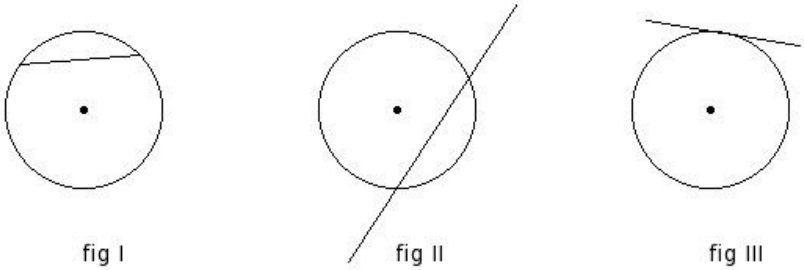

fig I

fig II

fig III

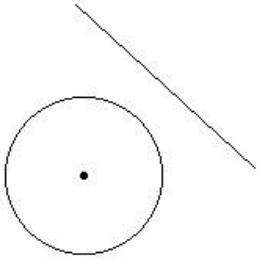

fig IV

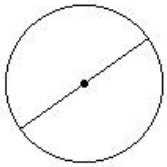

fig V

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

29. Which of the following figures represent a secant ?

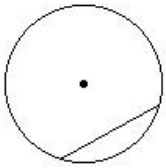

fig I

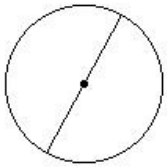

fig II

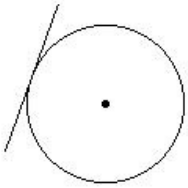

fig III

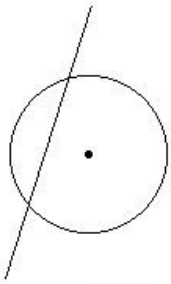

fig IV

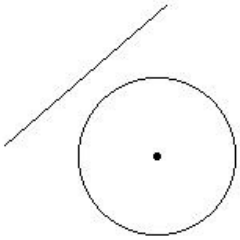

fig V

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

30. Which of the following figures represent a tangent ?

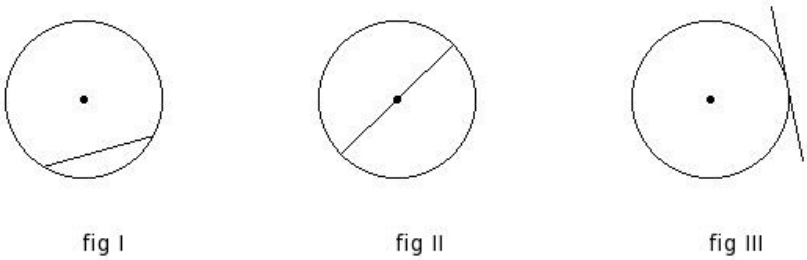

fig I fig II fig III

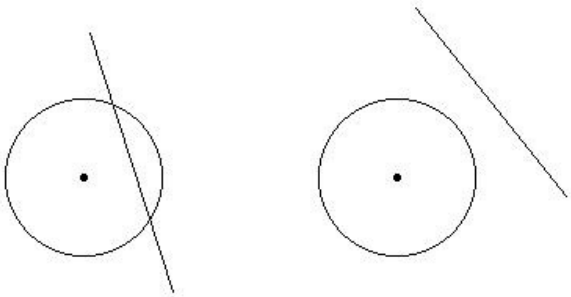

fig IV fig V

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

31. Which of the following statements are true?

a) A circle divides the plane into three mutually disjoint sets of points.

b) $\frac{22}{7}$ is a rational number.

c) All diameters of a circle are chords.

d) All chords of a circle are diameters.

e) π is a rational number.

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

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

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

Assignment Key

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