EduSahara™ Assignment

Name : Circle Basics

Chapter : Circles

Grade : CBSE Grade X

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

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

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

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

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

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

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

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

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

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

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

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

7. Half of a circle is called

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

8. The perimeter of a circle is called

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

9. Which of the following statements are true?

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

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

10. Which of the following statements are true?

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

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

11. Which of the following statements are true?

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

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

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

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

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

15. If two circles of radii 8 cm and 3 cm touch internally, the distance between their centres is

(i) 3 cm (ii) 7 cm (iii) 5 cm (iv) 6 cm (v) 4 cm

16. If two circles of radii 8 cm and 4 cm touch externally, the distance between their centres is

(i) 11 cm (ii) 13 cm (iii) 14 cm (iv) 10 cm (v) 12 cm

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

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

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

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

20. Which of the following statements are true?

a) The radius is the shortest chord.
b) The diameter is the longest 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) A chord divides a circle into two sectors.

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

21. Which of the following statements are true?

a) Equal length chords are equidistant from the centre of the circle.
b) Equal length chords subtend equal angles at 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) No two chords bisects each other.

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

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

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

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

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

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

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

25. Circles having common centre are called

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

26. If two circles are concentric, then

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

(iv) their diameters are same

27. Which of the following figures represent a chord ?

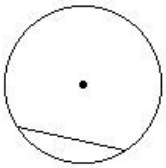

fig I

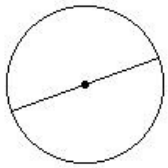

fig II

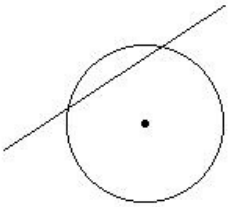

fig III

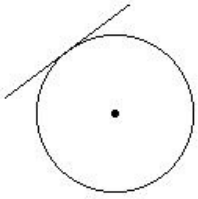

fig IV

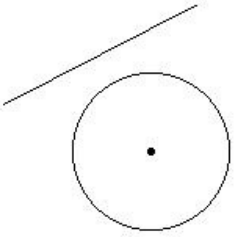

fig V

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

28. Which of the following figures represent a diameter ?

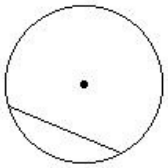

fig I

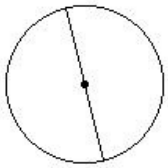

fig II

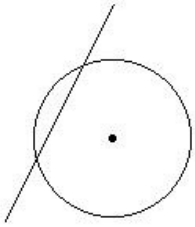

fig III

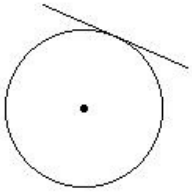

fig IV

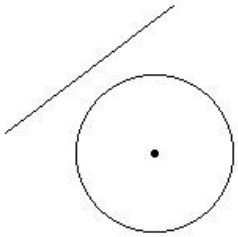

fig V

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

29. Which of the following figures represent a secant ?

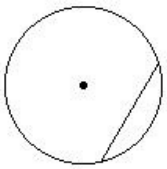

fig I

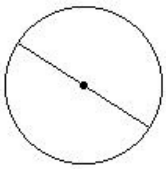

fig II

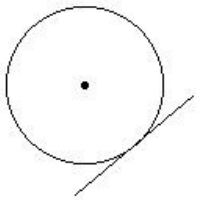

fig III

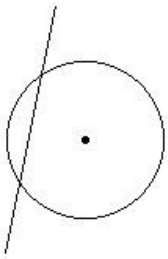

fig IV

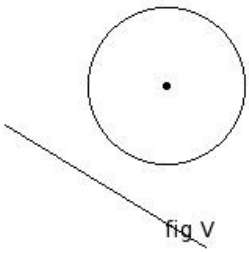

fig V

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

30. Which of the following figures represent a tangent ?

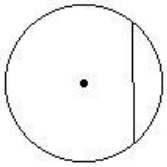

fig I

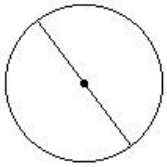

fig II

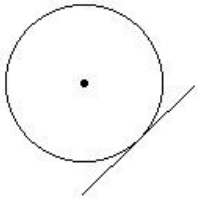

fig III

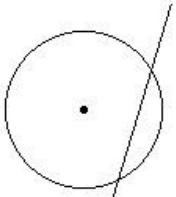

fig IV

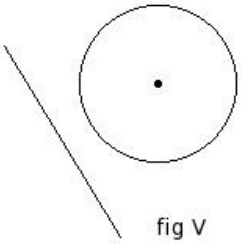

fig V

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

31. Which of the following statements are true?

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

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

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

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

Assignment Key

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