Name : Circle Basics

Chapter : Circles

Grade: CBSE Grade X

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Ι.	The mid-point of	the diameter	от а	circle is called	

- (i) diameter (ii) centre (iii) circumference (iv) radius (v) chord
- 2. A line segment joining any point on the circle with its centre is called
 - (i) circumference (ii) major segment (iii) segment (iv) centre (v) radius
- 3. A line segment having its end points on the circle is called a
 - (i) circumference (ii) major segment (iii) centre (iv) segment (v) chord
- 4. A chord that passes through the centre of the circle is called
 - (i) radius (ii) circumference (iii) diameter (iv) segment (v) centre
- 5. A chord of a circle divides the whole circular region into two parts, each called a
 - (i) radius (ii) centre (iii) semi-circle (iv) chord (v) segment
- 6. The segment of the circle containing the centre of the circle is called
 - (i) diameter (ii) centre (iii) semi-circle (iv) radius (v) major segment
- 7. Half of a circle is called
 - (i) radius (ii) diameter (iii) major segment (iv) centre (v) semi-circle
- 8. The perimeter of a circle is called
 - (i) circumference (ii) segment (iii) diameter (iv) major segment (v) centre
- 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) Every circle has a unique centre.
 - 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) {b,d,e} (ii) {b,a} (iii) {b,a,c} (iv) {a,c,e} (v) {d,c}
- 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,a,d} (ii) {a,d,e} (iii) {c,d} (iv) {b,a} (v) {b,c,e}

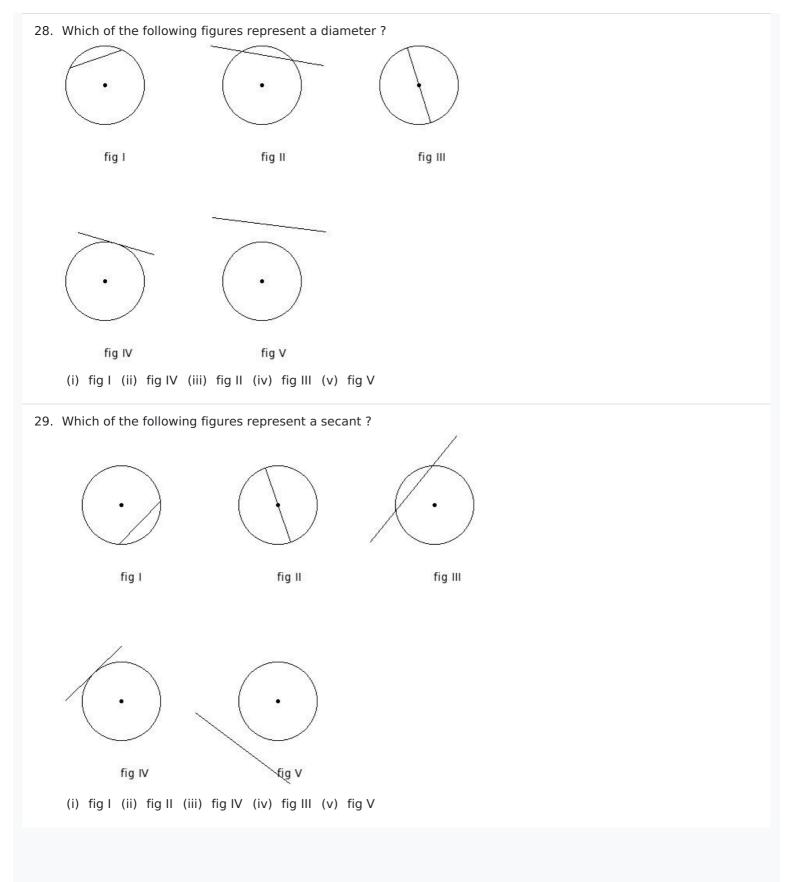
	 a) One and only one tangent can be drawn to pass through a point on a circle. b) A secant of a circle is a segment having its end points on the circle. c) Diameter of a circle is a part of the semi-circle of the circle. d) One and only one tangent can be drawn to a circle from a point outside it. e) Every circle has a unique diameter. (i) {e,b,a} (ii) {d,c} (iii) {a,c} (iv) {b,a} (v) {d,c,a}
	(i) {e,b,a, (ii) {u,c, (iii) {a,c, (iv) {b,a, (v) {u,c,a, (ii) {u,c,a, (iii) {u,c,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) concentric (iii) not similar (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) 120° (ii) 105° (iii) 100° (iv) 90° (v) 95°
15.	If two circles of radii 10 cm and 5 cm touch internally, the distance between their centres is (i) 6 cm (ii) 3 cm (iii) 5 cm (iv) 4 cm (v) 7 cm
16.	If two circles of radii 12 cm and 7 cm touch externally, the distance between their centres is (i) 17 cm (ii) 19 cm (iii) 18 cm (iv) 20 cm (v) 21 cm
17.	A line which intersects the circle at two distinct points is called a (i) semi-circle (ii) segment (iii) circumference (iv) secant (v) tangent
18.	A line which touches a circle at only one point is called a (i) tangent (ii) semi-circle (iii) centre (iv) quadrant (v) secant
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) quadrant (iii) diameter (iv) major segment (v) chord
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) The diameter is the longest chord. e) Atmost one chord can be drawn on a circle with a certain length. (i) {a,c} (ii) {e,a,c} (iii) {b,d,c} (iv) {b,d} (v) {c,d}
21	Which of the following statements are true?
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) Equal length chords subtend equal angles at the centre of the circle. e) The farther the chord is from the centre, the larger the angle it subtends at the centre.

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

11. Which of the following statements are true?

22. The point of intersection of the angular bisectors of a triangle is (i) excentre (ii) orthocentre (iii) incentre (iv) centroid (v) circumcentre 23. The angle subtended by the semicircle at the centre is (i) 210° (ii) 195° (iii) 185° (iv) 180° (v) 190° 24. The angle subtended by the diameter at any point on the circle is (i) 95° (ii) 120° (iii) 105° (iv) 90° (v) 100° 25. Circles having common centre are called (i) concentric circles (ii) congruent circles (iii) intersecting circles (iv) similar circles 26. If two circles are concentric, then (i) their perimeters are same (ii) their diameters are same (iii) their radii are same (iv) their centres are same 27. Which of the following figures represent a chord? fig I fig II fig III fig IV fig V

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





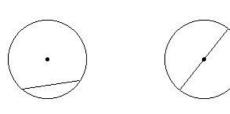


fig I fig II

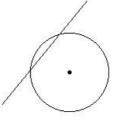


fig III

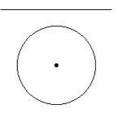
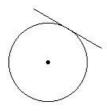


fig IV



fia V

- (i) fig III (ii) fig IV (iii) fig II (iv) fig I (v) fig V
- 31. Which of the following statements are true?
 - a) All chords of a circle are diameters.
 - b) A circle divides the plane into three mutually disjoint sets of points.
 - c) π is a rational number.
 - d) All diameters of a circle are chords.
 - e) $\frac{22}{7}$ is a rational number.
 - (i) $\{a,b\}$ (ii) $\{a,b,d\}$ (iii) $\{b,d,e\}$ (iv) $\{c,d\}$ (v) $\{a,c,e\}$
- 32. Points which lie on the circumference of the circle are called
 - (i) Concurrent points (ii) Concyclic points (iii) Coincident points (iv) Similar points (v) Cyclic points

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

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