

Name : Circle Basics Chapter : Circles Grade : ICSE Grade VII License : Non Commercial Use

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

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

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

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

- 3. A line segment having its end points on the circle is called a(i) radius (ii) segment (iii) chord (iv) centre (v) semi-circle
- 4. A chord that passes through the centre of the circle is called(i) diameter (ii) major segment (iii) centre (iv) radius (v) chord
- 5. A chord of a circle divides the whole circular region into two parts, each called a(i) diameter (ii) major segment (iii) segment (iv) circumference (v) semi-circle
- 6. The segment of the circle containing the centre of the circle is called
  - (i) diameter (ii) centre (iii) major segment (iv) chord (v) semi-circle
- 7. Half of a circle is called
  - (i) semi-circle (ii) circumference (iii) centre (iv) diameter (v) radius

8. The perimeter of a circle is called

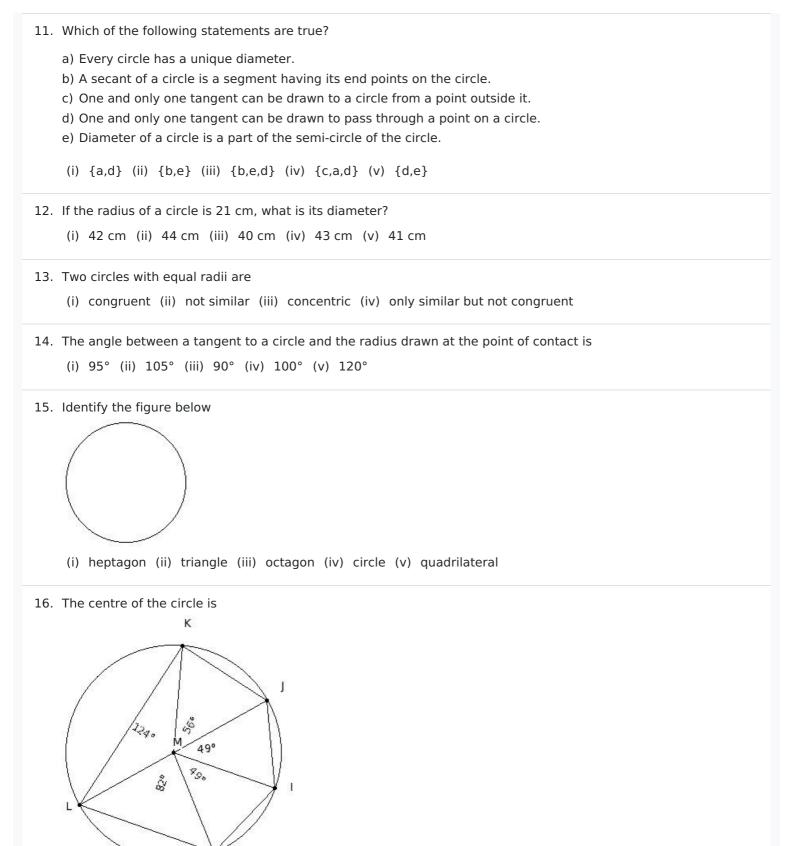
(i) chord (ii) segment (iii) centre (iv) radius (v) circumference

9. Which of the following statements are true?

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

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

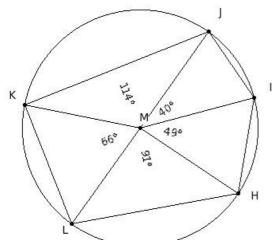
- 10. Which of the following statements are true?
  - a) An infinite number of diameters may be drawn for a circle.
  - b) Two semi-circles of a circle together make the whole circle.
  - c) An infinite number of chords may be drawn for a circle.
  - d) One and only one tangent can be drawn to a circle from a point outside it.
  - e) Every circle has a unique diameter.
  - (i)  $\{d,a,b\}$  (ii)  $\{d,e,c\}$  (iii)  $\{a,b,c\}$  (iv)  $\{e,b\}$  (v)  $\{d,a\}$



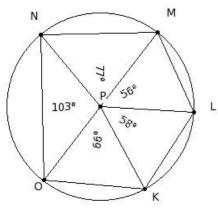
(i) K (ii) I (iii) M (iv) H (v) J

H

17. The chords of the circle are

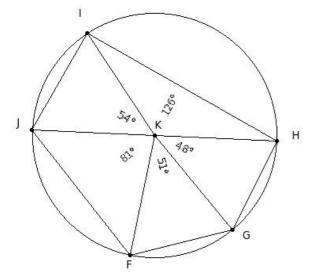


- (i)  $\overline{HI}$ ,  $\overline{JJ}$ ,  $\overline{JK}$ ,  $\overline{KL}$ ,  $\overline{LH}$ ,  $\overline{JL}$  (ii)  $\overline{MH}$ ,  $\overline{MI}$ ,  $\overline{MJ}$ ,  $\overline{MK}$ ,  $\overline{ML}$  (iii)  $\overline{HI}$ ,  $\overline{JJ}$ ,  $\overline{JK}$ ,  $\overline{KL}$ ,  $\overline{LH}$ ,  $\overline{MH}$  (iv)  $\overline{JJ}$ ,  $\overline{JK}$ ,  $\overline{KL}$ ,  $\overline{LH}$
- $(v) \overline{HI}, \overline{IJ}, \overline{JK}, \overline{KL}, \overline{LH}$
- 18. The diameters of the circle are



(i)  $\overline{PK}$ ,  $\overline{PL}$ ,  $\overline{PM}$ ,  $\overline{PN}$ ,  $\overline{PO}$ ,  $\overline{MO}$  (ii)  $\overline{MO}$  (iii)  $\overline{KL}$ ,  $\overline{LM}$ ,  $\overline{MN}$ ,  $\overline{NO}$ ,  $\overline{OK}$  (iv)  $\overline{KL}$ ,  $\overline{LM}$ ,  $\overline{MN}$ ,  $\overline{NO}$ ,  $\overline{OK}$ ,  $\overline{MO}$ 

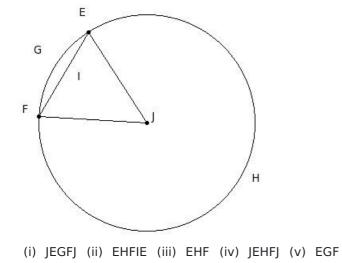
- (v)  $\overline{PK}$ ,  $\overline{PL}$ ,  $\overline{PM}$ ,  $\overline{PN}$ ,  $\overline{PO}$
- 19. The radii of the circle are



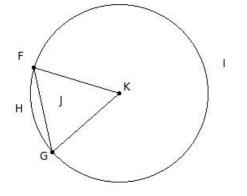
 $(i) \quad \overline{FG}, \overline{GH}, \overline{HI}, \overline{IJ}, \overline{JF}, \overline{HJ} \quad (ii) \quad \overline{KF}, \overline{KG}, \overline{KH}, \overline{KI}, \overline{KJ} \quad (iii) \quad \overline{GH}, \overline{HI}, \overline{IJ}, \overline{JF} \quad (iv) \quad \overline{FG}, \overline{GH}, \overline{HI}, \overline{IJ}, \overline{JF}$ 

(V)  $\overline{FG}$ ,  $\overline{GH}$ ,  $\overline{HI}$ ,  $\overline{IJ}$ ,  $\overline{JF}$ ,  $\overline{KF}$ 

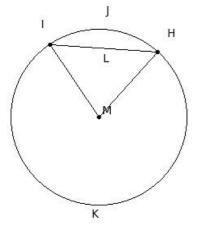




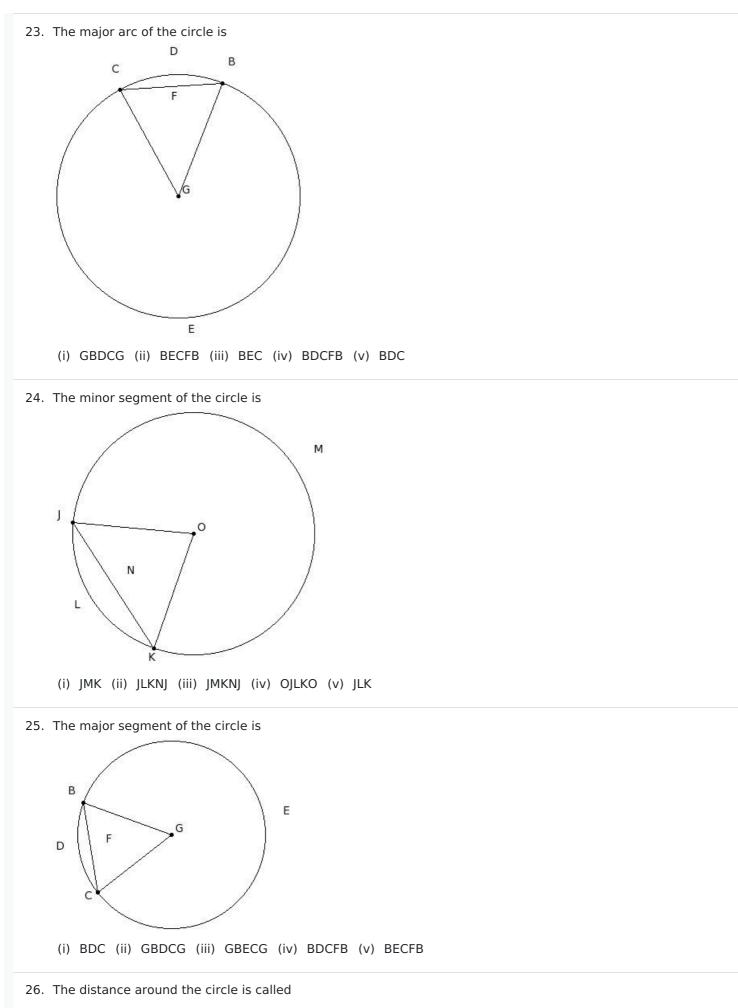
21. The major sector of the circle is



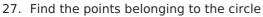
- (i) KFIGK (ii) FIG (iii) FHG (iv) FIGJF (v) FHGJF
- 22. The minor arc of the circle is

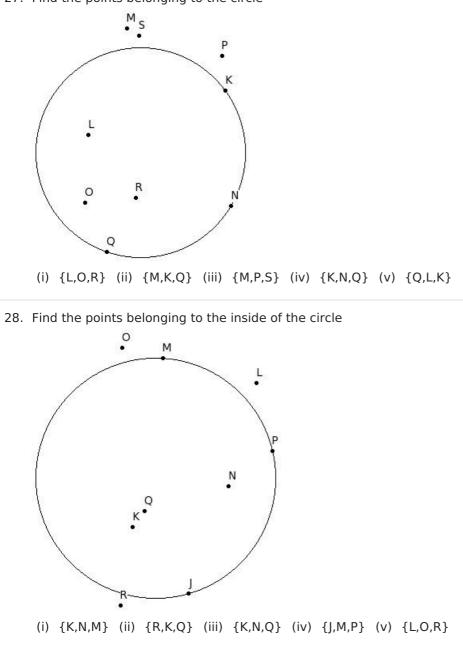


(i) HJILH (ii) MHKIM (iii) HKI (iv) HKILH (v) HJI

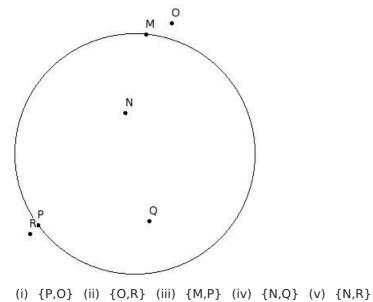


(i) diameter (ii) arc (iii) radius (iv) circumference (v) chord





29. Find the points belonging to the outside of the circle



## 30. Which of the following statements are true?

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

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

31. Which of the following statements are true?

- a) The farther the chord is from the centre, the larger the angle it subtends at the centre.
- b) Equal length chords subtend equal angles at the centre of the circle.
- c) Equal length chords are equidistant from the centre of the circle.
- d) No two chords bisects each other.
- e) The longest chord of the circle passes through the centre of the circle.
- (i) {a,b} (ii) {a,b,c} (iii) {d,c} (iv) {a,d,e} (v) {b,c,e}
- 32. Which of the following statements are true?
  - a) A circle divides the plane on which it lies into three parts.
  - b) A sector is the area enclosed by two radii and a chord.
  - c) The area enclosed by a chord and its major arc is called major segment.
  - d) The diameter divides the circle into two unequal parts.
  - e) The area enclosed by a chord and its minor arc is called minor segment.
  - (i)  $\{b,d,e\}$  (ii)  $\{b,a,c\}$  (iii)  $\{a,c,e\}$  (iv)  $\{b,a\}$  (v)  $\{d,c\}$
- 33. Which of the following statements are true?
  - a) The diameter divides the circle into two unequal parts.
  - b) A sector is the area enclosed by two radii and a chord.
  - c) Two chords bisect each other.
  - d) The longest of all chords of a circle is called diameter.
  - e) The midpoint of any diameter of a circle is its centre.
  - (i) {c,a,d} (ii) {d,e} (iii) {a,d} (iv) {b,e} (v) {b,e,d}
- 34. Which of the following statements are true?
  - a) Only one circle can be drawn passing through two points.
  - b) Only one circle can be drawn with a centre.
  - c) Infinite circles can be drawn passing through three collinear points.
  - d) Atmost one circle can be drawn passing through three non-collinear points.
  - e) Exactly two tangents can be drawn parallel to a secant.
  - (i) {b,e,d} (ii) {a,d} (iii) {b,e} (iv) {d,e} (v) {c,a,d}
- 35. Which of the following statements are true?
  - a) A tangent is the limiting case of a secant.
  - b) A secant has two end points.
  - c) A radius is a limiting case of a diameter.
  - d) A secant and a chord are same.
  - e) A diameter is a limiting case of a chord.

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

## 36. Which of the following statements are true?

- a) Only one tangent can be drawn through a point on a circle.
- b) The sides of a triangle can be tangents to a circle.
- c) Two tangents to a circle always intersect.
- d) Only two tangents can be drawn from a point outside the circle.
- e) Atmost one tangent can be drawn through a point inside the circle.

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

37. Which of the following figures represent a chord ?

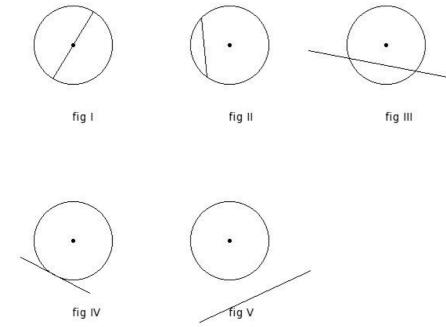


fig II

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

## 38. Which of the following figures represent a diameter ?

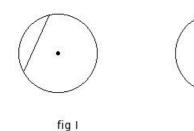
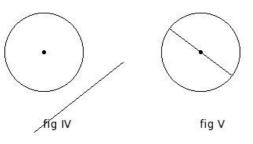
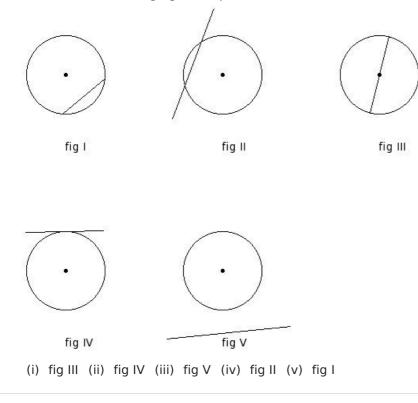


fig III

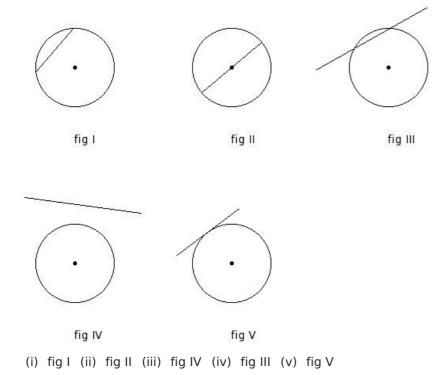


(i) fig II (ii) fig V (iii) fig IV (iv) fig III (v) fig I

39. Which of the following figures represent a secant ?



## 40. Which of the following figures represent a tangent ?



19) (ii) 20)				5) (iii)	6) (iii)
13) (i) 14) 19) (ii) 20)	(v) <u>c</u>	9) (ii)			
19) (ii) 20)			10) (iii)	11) (v)	12) (i)
	-) (iii)	15) (iv)	16) (iii)	17) (v)	18) (ii)
25) (v) 26)	)) (i) 2	21) (i)	22) (v)	23) (iii)	24) (ii)
	5) (iv) 2	27) (iv)	28) (iii)	29) (ii)	30) (ii)
31) (v) 32)	2) (iii)	33) (ii)	34) (iv)	35) (v)	36) (ii)
37) (iv) 38)		39) (iv)	40) (v)		

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