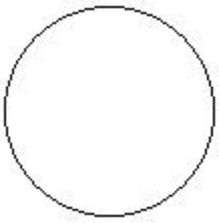
EduSahara™ Learning Center Assignment

Grade : Class VIII, ICSE
Chapter : Circle
Name : Circle Basics
Licensed To : Teachers and Students for non-commercial use

---

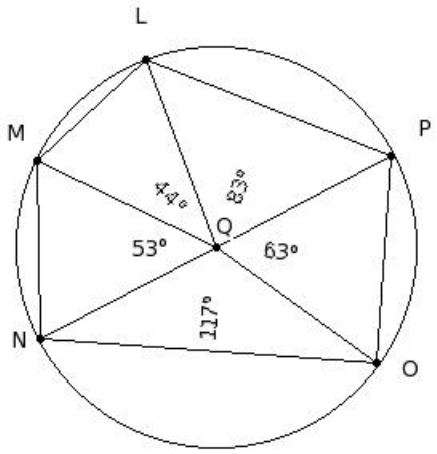
1. Identify the figure below



(i) octagon (ii) decagon (iii) circle (iv) angle (v) quadrilateral

---

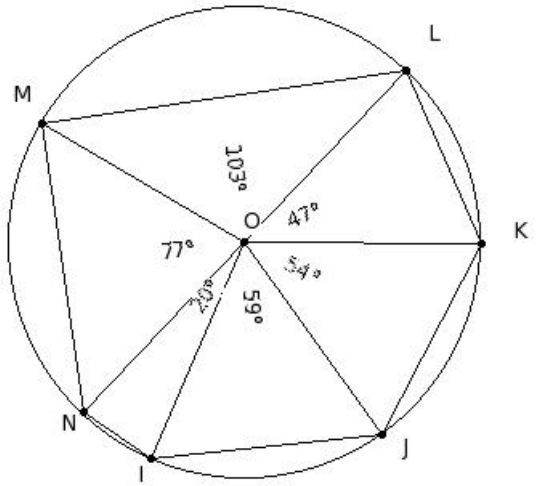
2. The centre of the circle is



(i) O (ii) L (iii) N (iv) M (v) Q

---

3. The chords of the circle are



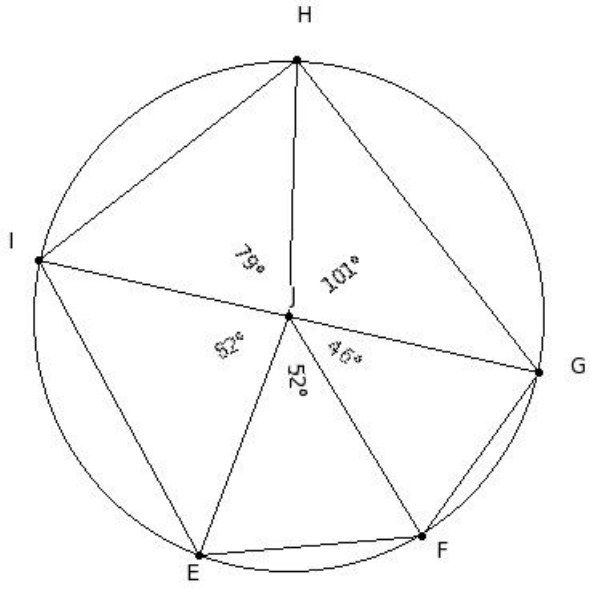
(i) $\overline{IJ}$, $\overline{JK}$, $\overline{KL}$, $\overline{LM}$, $\overline{MN}$, $\overline{NI}$ (ii) $\overline{OI}$, $\overline{OJ}$, $\overline{OK}$, $\overline{OL}$, $\overline{OM}$, $\overline{ON}$

(iii) $\overline{IJ}$, $\overline{JK}$, $\overline{KL}$, $\overline{LM}$, $\overline{MN}$, $\overline{NI}$, $\overline{OI}$ (iv) $\overline{JK}$, $\overline{KL}$, $\overline{LM}$, $\overline{MN}$, $\overline{NI}$

(v) $\overline{IJ}$, $\overline{JK}$, $\overline{KL}$, $\overline{LM}$, $\overline{MN}$, $\overline{NI}$, $\overline{LN}$

---

4. The diameters of the circle are



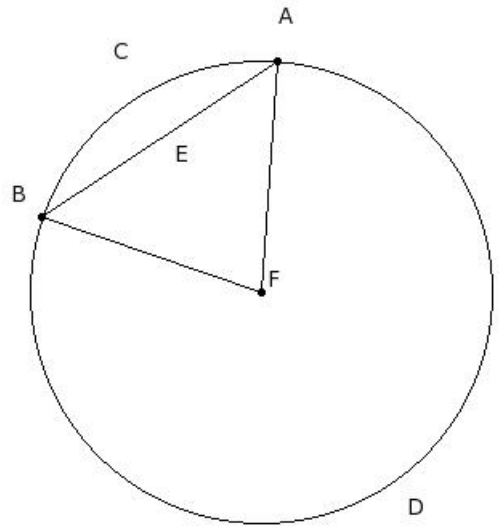
(i) $\overline{EF}$, $\overline{FG}$, $\overline{GH}$, $\overline{HI}$, $\overline{IE}$ (ii) $\overline{EF}$, $\overline{FG}$, $\overline{GH}$, $\overline{HI}$, $\overline{IE}$, $\overline{GI}$

(iii) $\overline{JE}$, $\overline{JF}$, $\overline{JG}$, $\overline{JH}$, $\overline{JI}$, $\overline{GI}$ (iv) $\overline{JE}$, $\overline{JF}$, $\overline{JG}$, $\overline{JH}$, $\overline{JI}$

(v) $\overline{GI}$

---

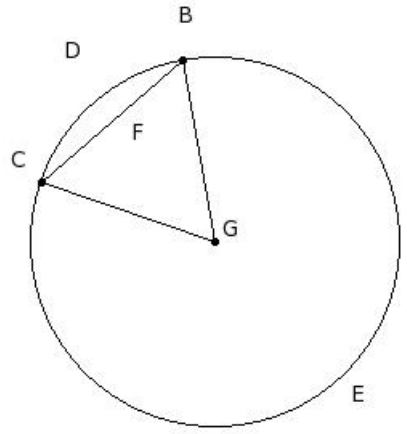
5. The minor sector of the circle is



(i) FADBF (ii) ACB (iii) FACBF (iv) ADB (v) ADBEA

---

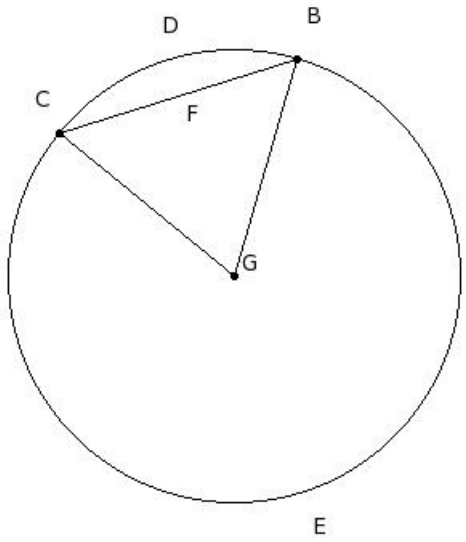
6. The major sector of the circle is



(i) BECFB (ii) BDCFB (iii) BEC (iv) BDC (v) GBECG

---

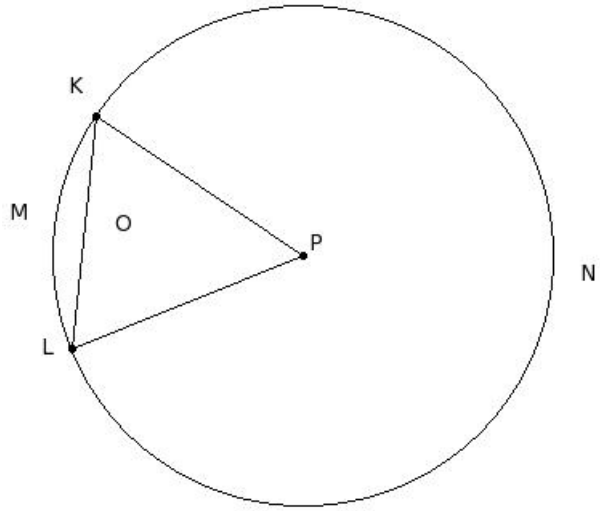
7. The minor arc of the circle is



(i) GBECG (ii) BDC (iii) BECFB (iv) BDCFB (v) BEC

---

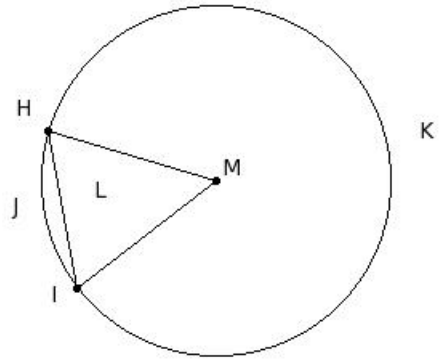
8. The major arc of the circle is



(i) KNL (ii) PKNLP (iii) KMLOK (iv) KML (v) PKMLP

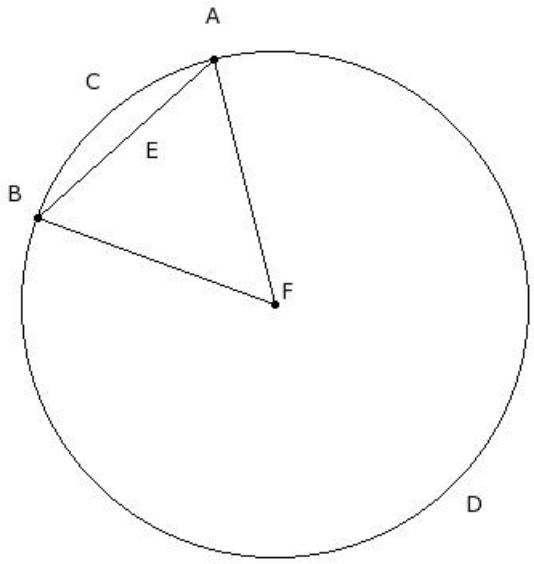
---

9. The minor segment of the circle is



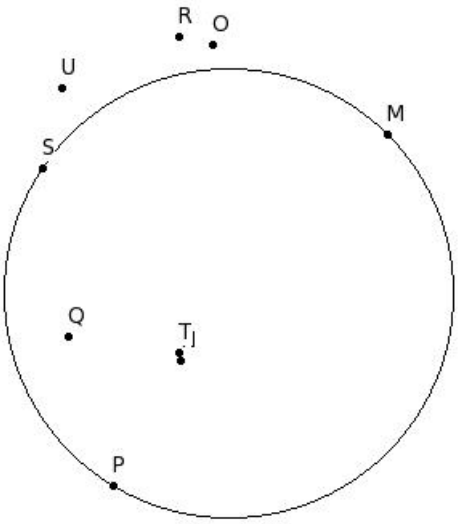
(i) HJILH (ii) MHKIM (iii) HKI (iv) MHJIM (v) HJI

10. The major segment of the circle is



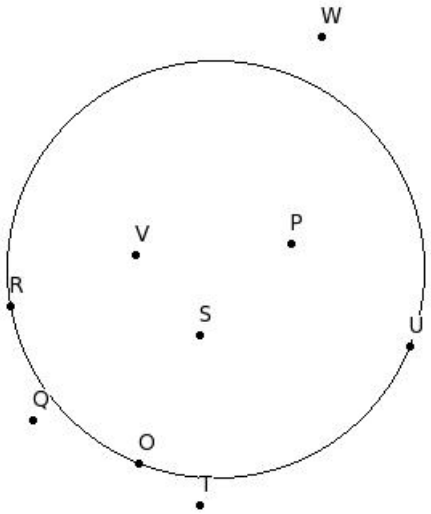
(i) FADBF (ii) ADB (iii) ACBEA (iv) ADBEA (v) ACB

11. Find the points belonging to the circle



(i) {N,Q,T} (ii) {Q,S,M} (iii) {M,P,S} (iv) {O,R,U} (v) {S,P,O}

12. Find the points belonging to the inside of the circle



(i) {P,S,V} (ii) {O,R,U} (iii) {V,P,Q} (iv) {S,U,P} (v) {Q,T,W}

---

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

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

---

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

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

---

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

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

---

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

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

---

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

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

---

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

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

---

19. Half of a circle is called

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

---

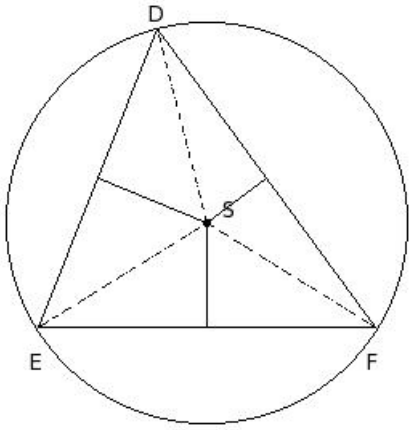
20. The perimeter of a circle is called

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

---

21. In the given triangle S is the circumcentre. If SD = 12.50 cm, find the circumference of the

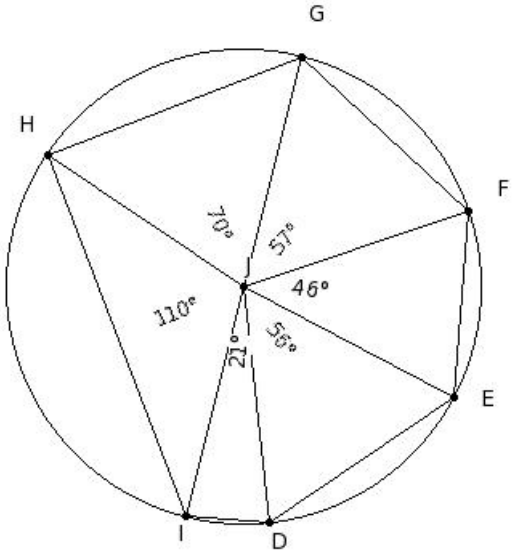
circumcircle



(i) 80.6 cm (ii) 76.6 cm (iii) 78.6 cm (iv) 79.6 cm (v) 77.6 cm

---

22. The radii of the circle are



(i) $\overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{ID}, \overline{GI}$ (ii) $\overline{JD}, \overline{JE}, \overline{JF}, \overline{JG}, \overline{JH}, \overline{JI}$

(iii) $\overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{ID}$ (iv) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{ID}$

(v) $\overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{ID}, \overline{JD}$

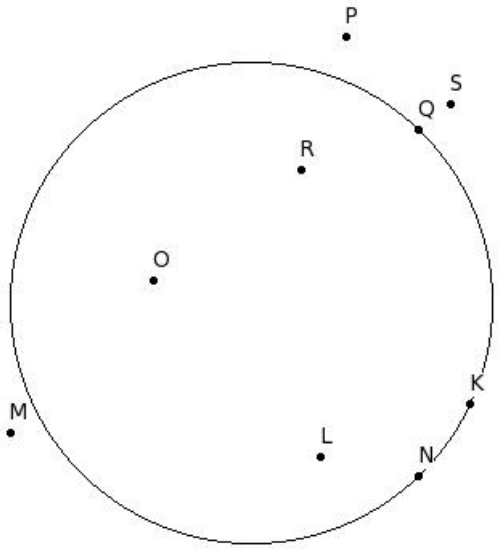
---

23. The distance around the circle is called

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

---

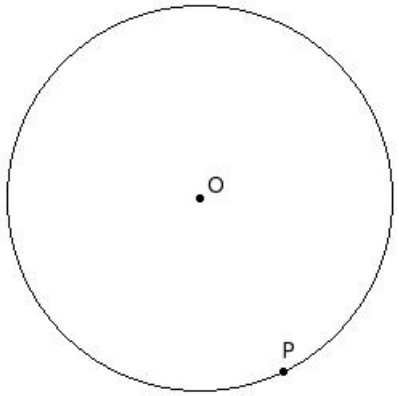
24. Find the points belonging to the outside of the circle



(i) {L,O,R} (ii) {P,M,Q} (iii) {L,S,P} (iv) {M,P,S} (v) {K,N,Q}

'O' is the centre of a circle of radius 'r' and 'P' is any point in its plane.

25. If $\overline{OP}$ = r ,then P is

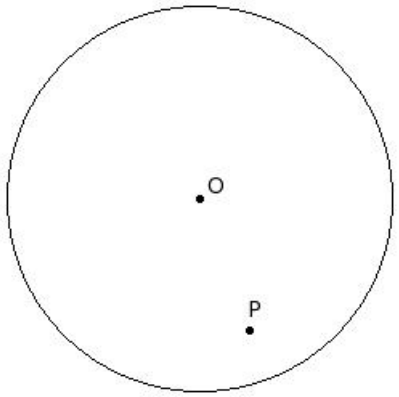


(i) outside the circle (ii) on the circle (iii) inside the circle

---

'O' is the centre of a circle of radius 'r' and 'P' is any point in its plane.

26. If $\overline{OP}$ < r,then P is

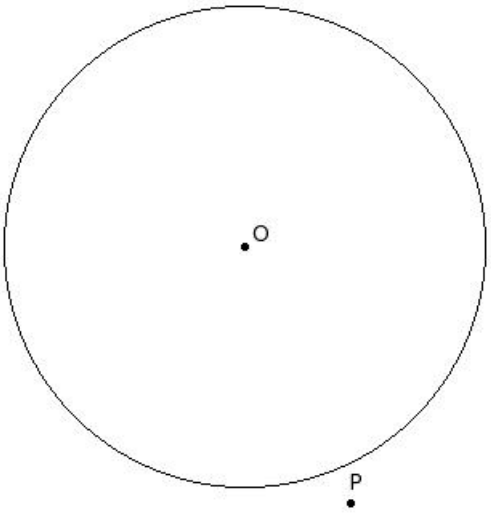


(i) on the circle (ii) outside the circle (iii) inside the circle

---

'O' is the centre of a circle of radius 'r' and 'P' is any point in its plane.

27. If $\overline{OP}$ > r,then P is



(i) inside the circle (ii) on the circle (iii) outside the circle

---

28. 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) A line can meet a circle atmost at two points
d) Every circle has a unique diameter
e) Every circle has a unique centre

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

---

29. Which of the following statements are true?

a) Two semi-circles of a circle together make the whole circle
b) Every circle has a unique diameter
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) An infinite number of diameters may be drawn for a circle

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

---

30. 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 a circle from a point outside it
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 pass through a point on a circle

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

---

31. If the diameter of a circle is 168 cm, what is its radius?

(i) 84 cm (ii) 82 cm (iii) 85 cm (iv) 86 cm (v) 83 cm

---

32. If the radius of a circle is 84 cm, what is its diameter?

(i) 168 cm (ii) 169 cm (iii) 166 cm (iv) 167 cm (v) 170 cm

---

33. Two circles with equal radii are

(i) congruent

(ii) not similar

(iii) concentric

(iv) only similar but not congruent

---

34. Which of the following figures represent a chord ?

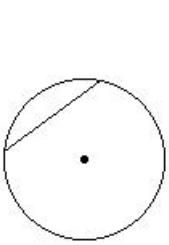


fig I

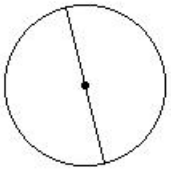


fig II

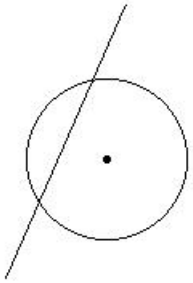


fig III

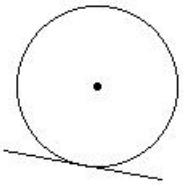


fig IV

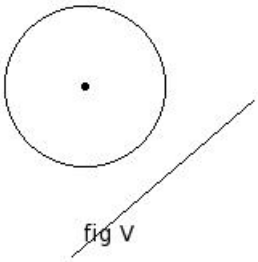


fig V

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

---

35. Which of the following figures represent a diameter ?

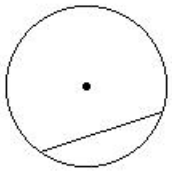


fig I

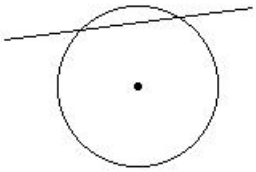


fig II

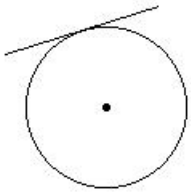


fig III

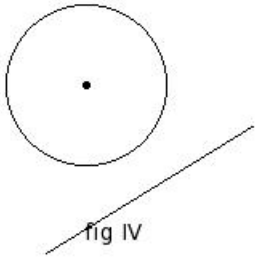


fig IV

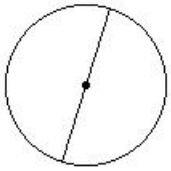


fig V

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

---

36. Which of the following figures represent a secant ?

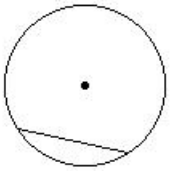


fig I

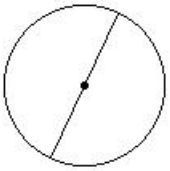


fig II

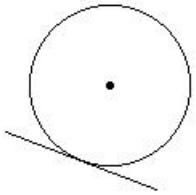


fig III

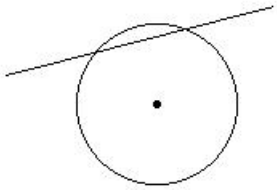


fig IV

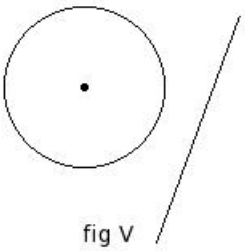


fig V

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

---

37. Which of the following figures represent a tangent ?

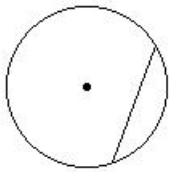


fig I

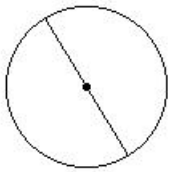


fig II

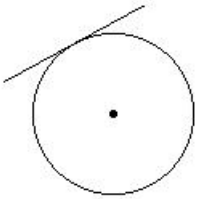


fig III

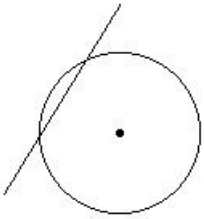


fig IV

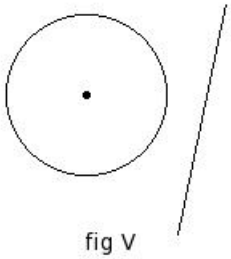


fig V

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

Assignment Key

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