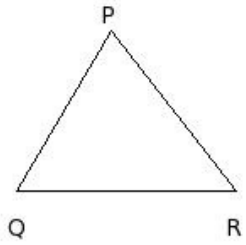
EduSahara™ Assignment

Name : Triangle Concepts

Chapter : Triangles

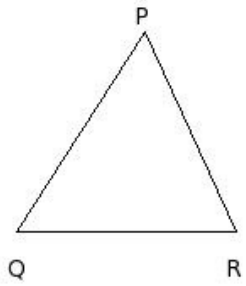
Grade : ICSE Grade VII

1. Identify the figure below



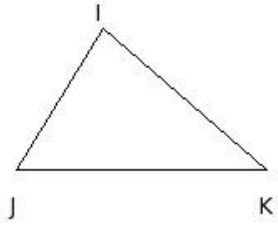
(i) quadrilateral (ii) octagon (iii) decagon (iv) triangle (v) heptagon

2. The side opposite to the vertex P



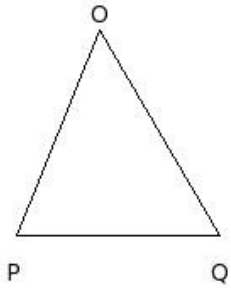
(i) $\overline{SQ}$ (ii) $\overline{RP}$ (iii) $\overline{PT}$ (iv) $\overline{PQ}$ (v) $\overline{QR}$

3. The side opposite to the vertex J



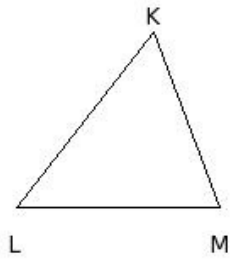
(i) $\overline{IJ}$ (ii) $\overline{LJ}$ (iii) $\overline{IM}$ (iv) $\overline{JK}$ (v) $\overline{KI}$

4. The side opposite to the vertex Q



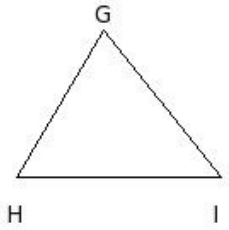
(i) $\overline{PQ}$ (ii) $\overline{OP}$ (iii) $\overline{OS}$ (iv) $\overline{QO}$ (v) $\overline{RP}$

5. The vertex opposite to the side $\overline{LM}$



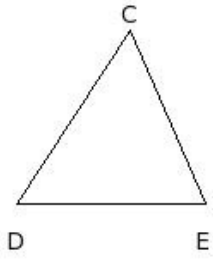
(i) O (ii) $\overline{MN}$ (iii) L (iv) K

6. The vertex opposite to the side $\overline{IG}$



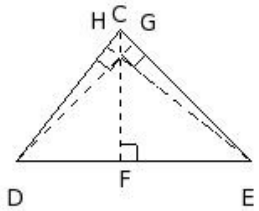
(i) $\overline{IJ}$ (ii) H (iii) G (iv) K

7. The vertex opposite to the side $\overline{CD}$



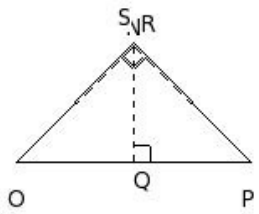
(i) C (ii) $\overline{EF}$ (iii) D (iv) E

8. The altitude corresponding to the side $\overline{DE}$



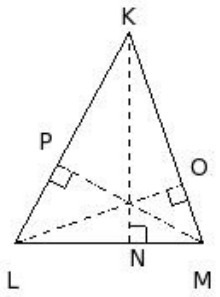
(i) $\overline{DG}$ (ii) $\overline{CD}$ (iii) $\overline{CG}$ (iv) $\overline{EH}$ (v) $\overline{CF}$

9. The altitude corresponding to the side $\overline{PN}$



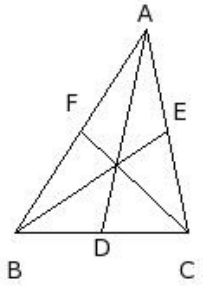
(i) $\overline{OR}$ (ii) $\overline{PS}$ (iii) $\overline{NO}$ (iv) $\overline{NR}$ (v) $\overline{NQ}$

10. The altitude corresponding to the side $\overline{KL}$



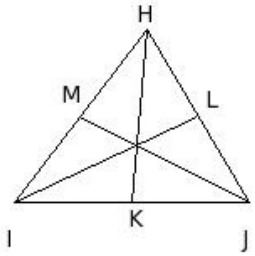
(i) $\overline{MP}$ (ii) $\overline{LO}$ (iii) $\overline{KN}$ (iv) $\overline{KO}$ (v) $\overline{KL}$

11. The median corresponding to the side $\overline{BC}$



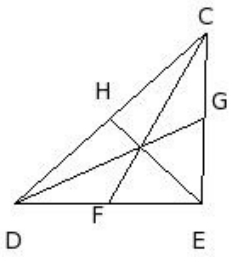
(i) $\overline{AD}$ (ii) $\overline{BE}$ (iii) $\overline{CF}$ (iv) $\overline{AE}$ (v) $\overline{AB}$

12. The median corresponding to the side $\overline{JH}$



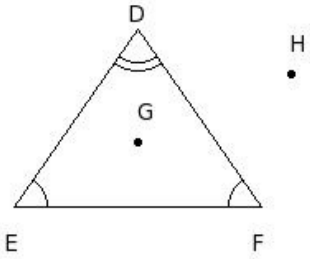
(i) $\overline{JM}$ (ii) $\overline{HI}$ (iii) $\overline{HK}$ (iv) $\overline{IL}$ (v) $\overline{HL}$

13. The median corresponding to the side $\overline{CD}$



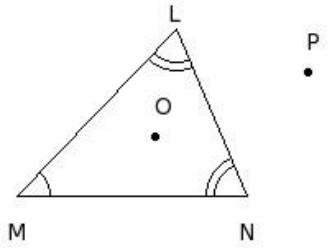
(i) $\overline{CF}$ (ii) $\overline{CD}$ (iii) $\overline{EH}$ (iv) $\overline{CG}$ (v) $\overline{DG}$

14. The sides of the triangle are



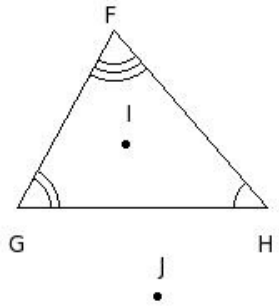
(i) $\overline{EF}, \overline{FD}, \overline{DE}$ (ii) $\overline{EG}, \overline{GD}, \overline{DE}$ (iii) $\overline{FG}, \overline{GE}, \overline{EF}$ (iv) $\overline{FH}, \overline{HE}, \overline{EF}$ (v) $\overline{GH}, \overline{HF}, \overline{FG}$

15. The name of the triangle is



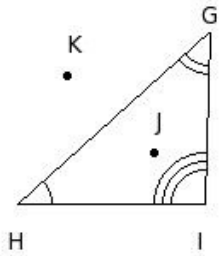
(i) △LMN (ii) △MNP (iii) △LMO (iv) △NOP (v) △MNO

16. The angles of the triangle are



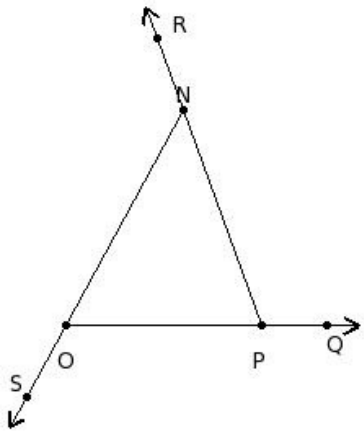
(i) ∠G , ∠H , ∠J (ii) ∠H , ∠I , ∠J (iii) ∠F , ∠G , ∠I (iv) ∠F , ∠G , ∠H (v) ∠G , ∠H , ∠I

17. The vertices of the triangle are



(i) H , I , K (ii) I , J , K (iii) G , H , I (iv) G , H , J (v) H , I , J

18. The exterior angles of the triangle are



(i) ∠SRP , ∠TPQ , ∠UQR (ii) ∠QRO , ∠ROP , ∠SPR (iii) ∠RQO , ∠SOP , ∠TPQ (iv) ∠QPN , ∠RNO , ∠SOP

(v) ∠PQN , ∠QNO , ∠ROQ

19. The point of intersection of the altitudes of a triangle is called

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

20. The point of intersection of the perpendicular bisectors of the sides of a triangle is called

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

21. The point of intersection of the bisectors of the interior angles of a triangle is called

(i) centroid (ii) orthocentre (iii) median (iv) incentre (v) altitude

22. The point of intersection of the bisectors of the interior angle and the two exterior opposite angles of a triangle is called

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

23. The point of intersection of the medians of a triangle is called

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

24. The line joining each vertex to the mid-point of the opposite side of a triangle is called

(i) excentre (ii) median (iii) altitude (iv) centroid (v) circumcentre

25. The perpendicular drawn from each vertex to the opposite side of a triangle is called

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

26. Which of the following may lie outside or on the triangle?

a) circumcentre
b) centroid
c) incentre
d) orthocentre
e) excentre

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

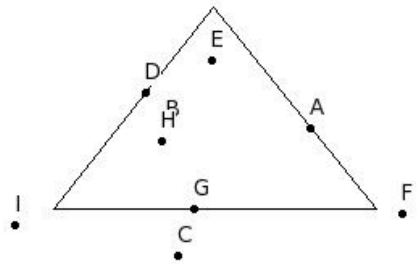
27. Sum of the interior angles in a triangle is

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

28. How many diagonals does a triangle have?

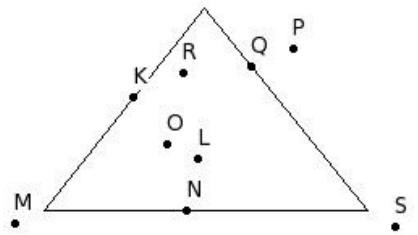
(i) 4 (ii) 1 (iii) 3 (iv) 2 (v) 0

29. Identify the points that are on the triangle



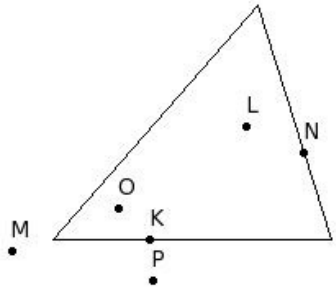
(i) {A,D,I} (ii) {G,D,B} (iii) {B,E,H} (iv) {C,F,I} (v) {A,D,G}

30. Identify the points that are inside the triangle



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

31. Identify the points that are outside the triangle



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

32. Consider the following figure. State which of the following statements are true

a) $\overline{OP} = \overline{PQ}$

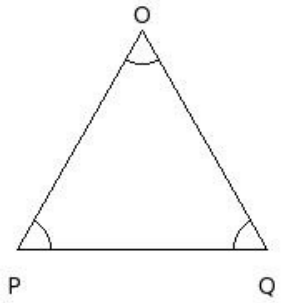
b) $\overline{QO} = \overline{OP}$

c) $\overline{PQ} \neq \overline{QO}$

d) $\overline{QO} \neq \overline{OP}$

e) $\overline{PQ} = \overline{QO}$

f) $\overline{OP} \neq \overline{PQ}$



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

33. Consider the following figure. State which of the following statements are true

a) $\overline{PQ} \neq \overline{QR}$

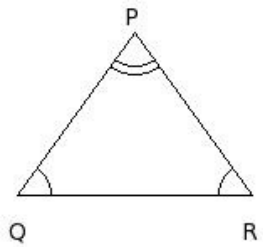
b) $\overline{RP} = \overline{PQ}$

c) $\overline{RP} \neq \overline{PQ}$

d) $\overline{PQ} = \overline{QR}$

e) $\overline{QR} \neq \overline{RP}$

f) $\overline{QR} = \overline{RP}$



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

34. Consider the following figure. State which of the following statements are true

a) $\overline{RP} = \overline{PQ}$

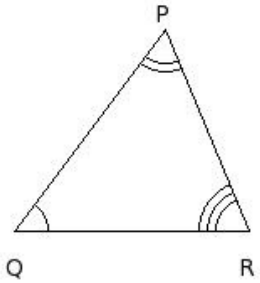
b) $\overline{QR} \neq \overline{RP}$

c) $\overline{RP} \neq \overline{PQ}$

d) $\overline{QR} = \overline{RP}$

e) $\overline{PQ} \neq \overline{QR}$

f) $\overline{PQ} = \overline{QR}$



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

35. Consider the following figure. State which of the following statements are true

a) $\angle E \neq \angle C$

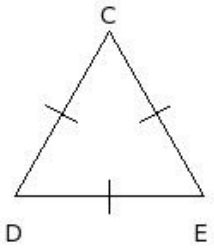
b) $\angle C \neq \angle D$

c) $\angle E = \angle C$

d) $\angle D \neq \angle E$

e) $\angle C = \angle D$

f) $\angle D = \angle E$



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

36. Consider the following figure. State which of the following statements are true

a) $\angle D = \angle E$

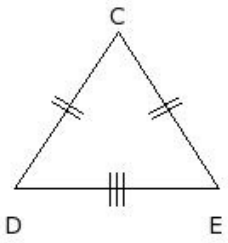
b) $\angle E = \angle C$

c) $\angle E \neq \angle C$

d) $\angle D \neq \angle E$

e) $\angle C \neq \angle D$

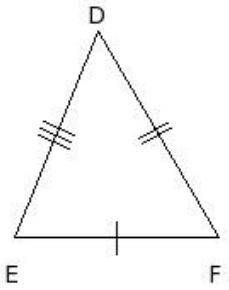
f) $\angle C = \angle D$



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

37. Consider the following figure. State which of the following statements are true

a) $\angle E = \angle F$
b) $\angle F = \angle D$
c) $\angle F \neq \angle D$
d) $\angle D \neq \angle E$
e) $\angle D = \angle E$
f) $\angle E \neq \angle F$



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

Assignment Key

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