



TEST PAPER: MATHEMATICS

Time: 50 Minutes

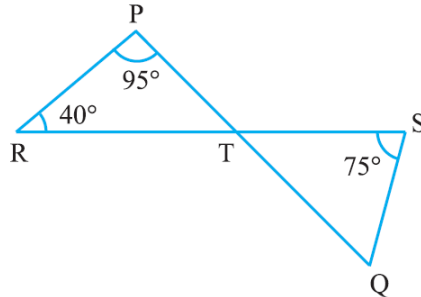
Class: 9th I.C.S.E.

Max. Marks: 30 Marks Date: 1st August, 2018

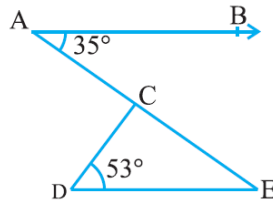
Marking Scheme: Four questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

Question 1:

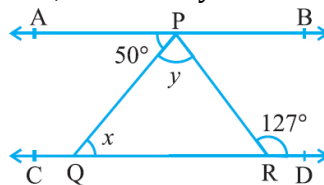
- a. In figure below, if lines PQ and RS intersect at point T, such that $\angle PRT = 40^\circ$, $\angle RPT = 95^\circ$ and $\angle TSQ = 75^\circ$, find $\angle SQT$.



- b. In figure below, $AB \parallel DE$, $\angle BAC = 35^\circ$ and $\angle CDE = 53^\circ$, find $\angle DCE$.

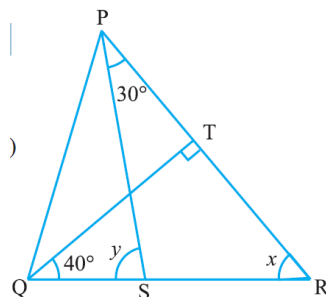


- c. if $AB \parallel CD$, $\angle APQ = 50^\circ$ and $\angle PRD = 127^\circ$, find x and y.



Question 2:

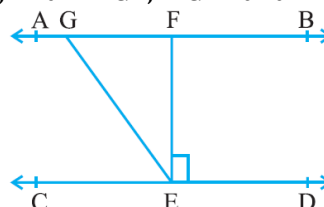
- a. In figure below, if $QT \perp PR$, $\angle TQR = 40^\circ$ and $\angle SPR = 30^\circ$, find x and y.



- b. Illustrate the following terms with rough diagrams:

- Centroid
- Orthocentre

- c. If $AB \parallel CD$, $EF \perp CD$ and $\angle GED = 126^\circ$, find $\angle AGE$, $\angle GEF$ and $\angle FGE$.



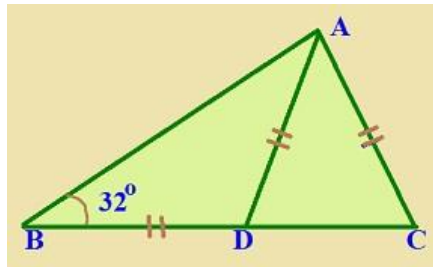
Question 3:

a. Illustrate the following terms with rough diagrams:

iii. Circumcentre

iv. Incentre

b. In the diagram given below $BD \cong AD \cong AC$ and $m \angle ABD = 32^\circ$



Find the measures of

a. $\angle BAD$

b. $\angle ADB$

c. $\angle ACD$

d. $\angle CAD$

c. In triangle ABC, $AB = AC$. Find the values of x, y . Also calculate the lengths AB, AC and the measures of angles B and C.

