

1st UNIT TESTSTD: 9th EM/SE

TOPIC : 1 & 2

MARKS: 20

SUB: Geometry

DATE: 16/7/18

Q 1. Solve the following. (Any 2)

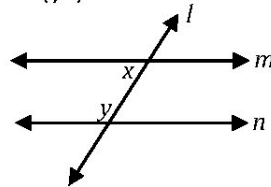
02 Marks

- Select the correct alternative from the answers of the questions given below.
 - How many lines are determined by three distinct points?
 - two
 - three
 - one or three
 - six
- The number of angles formed by a transversal of two lines is ____
 - 2
 - 4
 - 8
 - 16
- If co-ordinate of A is -4 and B is -5 then find $d(A, B)$

Q 2. Solve the following. (Any 2)

04 Marks

- If $x - y - z$, $l(xz) = 3\sqrt{7}$ $l(xy) = \sqrt{7}$ then $l(yz) = ?$
- $y = 108^\circ$ and $x = 71^\circ$ Are the lines m and n parallel? Justify?

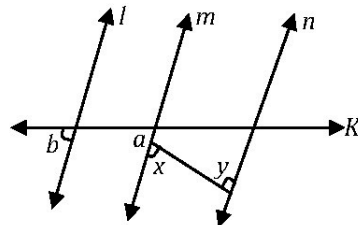


- Point M is the midpoint of seg AB. If $AB = 8$ then find the length of AM.

Q 3. Solve the following. (Any 2)

06 Marks

- Write the following statement in 'if-then' form.
 - The opposite angles of a parallelogram are congruent.
 - The diagonals of a rectangle are congruent.
 - In an isosceles triangle, the segment joining the vertex and the mid point of base is perpendicular to the base.
- If $\angle a \cong \angle b$ and $\angle x \cong \angle y$ then prove that line $l \parallel$ line n .



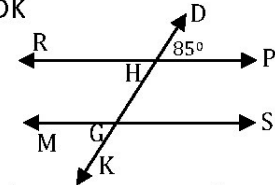
- From the information given below, find which of the point is between the other two. If the points are not collinear, state so.

(a) $d(P,Q) = 7$, $d(P,R) = 10$, $d(Q,R) = 3$

Q 4. Solve the following. (Any 2)

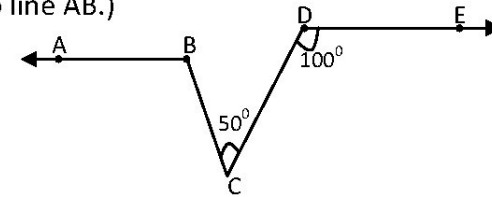
08 Marks

- In figure, line $RP \parallel$ line MS and line DK is their transversal. $\angle DHP = 85^\circ$ Find the measures of following angles.



- $\angle RHD$
- $\angle PHG$
- $\angle HGS$
- $\angle MGK$

- In figure, if ray $BA \parallel$ ray DE , $\angle C = 50^\circ$ and $\angle D = 100^\circ$. Find the measure of $\angle ABC$. (Hint: Draw a line passing through point C and parallel to line AB.)



- Prove : The opposite angles formed by two intersecting lines are of equal measure.