

# I UNIT TEST 2017-18

## Sub: Geometry

STD : IX

MARKS: 20

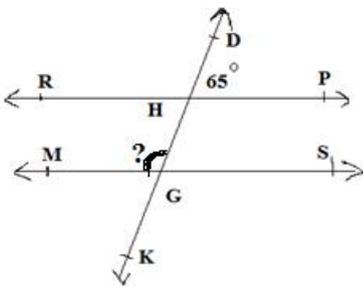
DATE: 08/07/2017

TIME: 1 Hr

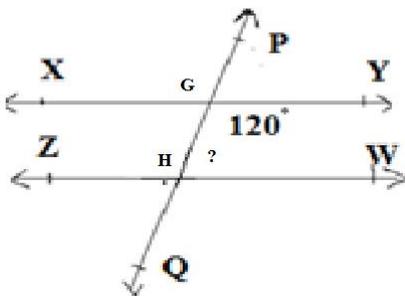
**Q.1[A] Answer the following ( any 4)**

**(4)**

- i. In  $\triangle ABC$ ,  $\angle A = 76^\circ$ ,  $\angle B = 48^\circ$ , find the measure of  $\angle C$ .
- ii. Point M is the midpoint of seg AB. If  $AB = 18$  then find the length of AM.
- iii. In the given figure, line  $RP \parallel$  line  $MS$  and line  $DK$  is their transversal.  $\angle DHP = 65^\circ$ . Find the measure of  $\angle HGM$ .



- iv. On a number line, co-ordinate of P,Q,R are 3, -5 and 6 respectively. State with reason whether the given statements is true or false.  
 $d(P,R) + d(Q, R) = d(P, R)$
- v. If two parallel lines are intersected by a transversal and measure of one interior angle is  $120^\circ$  then find the measure of other angle.



**Q.1[B] Attempt any 3 questions**

**(6)**

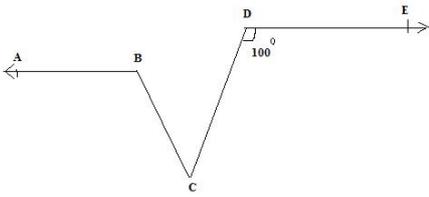
- i. Find the distance with the help of the number line

a)  $d(P, C)$

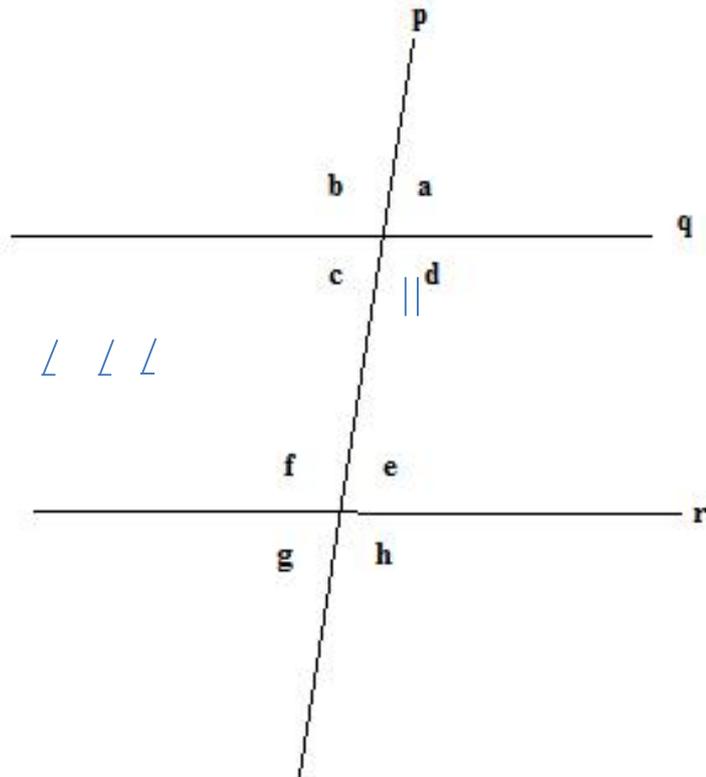
b)  $d(B, G)$



ii. In the given figure, if ray BA  $\parallel$  ray DE,  $m\angle C = 50^\circ$ ,  $m\angle D = 100^\circ$ . Find the measure of  $\angle B$ .



iii. Find from the given information whether the points are collinear or not collinear if  $d(X, Y) = 15$ ,



$d(A, B)$  if  $x = -3$  and  $y = 7$ .

then  $d(A, B) = ?$

(6)

transversal and  $\angle a = 70^\circ$ , find the values of

ii. Prove that "Opposite angles formed by two intersecting lines are of equal measures"

iii. Prove that "the sum of measures of all angles of a triangle is  $180^\circ$ ".

**Q.2 [B] Attempt any one question**

(4)

i. Prove that "if a pair of alternate angles formed by a transversal of two lines is congruent then the two lines are parallel"

ii. Prove that "the corresponding angles formed by a transversal of two parallel lines are of equal measures."