PRISM WORLD

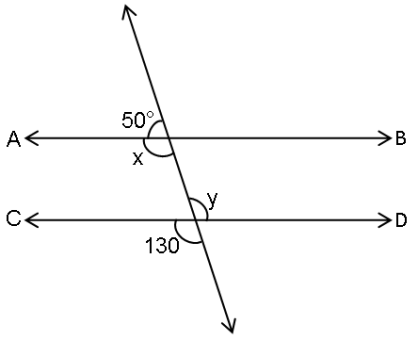
Std.: 9 (English) **Maths - II** **Marks: 20**

Date: **Time: 1 hour**

Chapter: 2

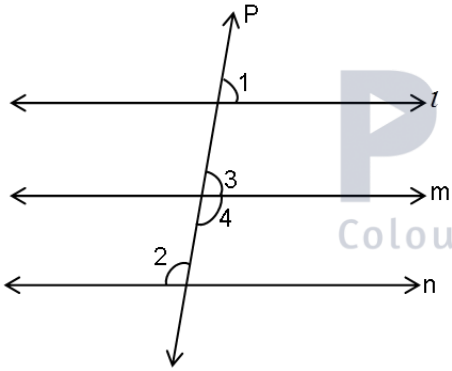
Q.1 Choose the carrect alternatives. **(3)**

1) Find the value of x, y if AB || CD



a. x = 150°, y = 50°
b. x = 130°, y = 50°
c. x = 130°, y = 130°
d. x = 50°, y = 130°

2)



from the figure answer the following question

∠4 and ∠ 2 are ..... angles.

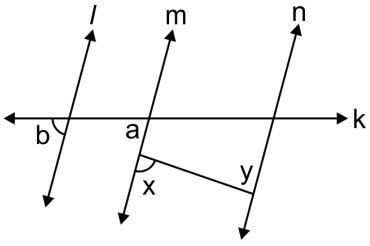
a. Corresponding b. Alternate c. Vertically opposite d. Co interior

3) If the interior angles formed by a transversal of two distinct lines are supplementary, then two lines are parallel.

a. True b. False c. Can be both d. None of these

Q.2 Solve the following question. (Any Two) **(4)**

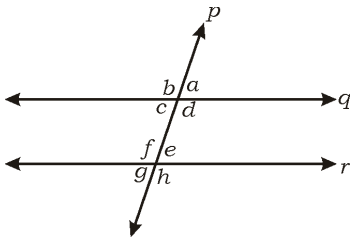
1)



In the adjoining figure ∠a ≅ ∠b. and ∠x ≅∠y. then prove that line l II line n

2) Prove that: If a pair of alternate angles formed by a transversal of two lines is congruent then the two lines are parallel.

3)



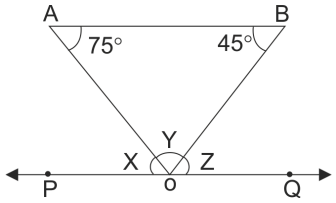
In the adjoining figure line q || r , Line p is a transversal and if ∠a = 80° find the values of 'f' and 'g'

Q.3 Solve the following question. (Any Two) **(6)**

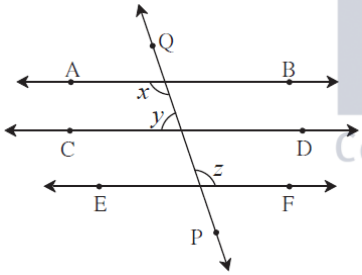
1) Prove that : If a pair of corresponding angles formed by a transversal of two lines is congruent then the two lines are parallel.

2)

In the figure, measure of two angles are given. If line PQ ‖ seg AB and P-O-Q then find the values of x, y and z.



3)

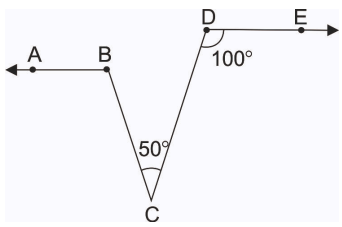


In the adjoining figure line AB ‖line CD ‖ line EF and line QP is the transversal. If y : z = 3:7, then find the measure of ∠x

Q.4 Solve the following question. (Any One) **(4)**

1) Prove that -
Theorem: If two parallel lines are intersected by transversal, the interior angles on either side of the transversal are supplementary.

2)

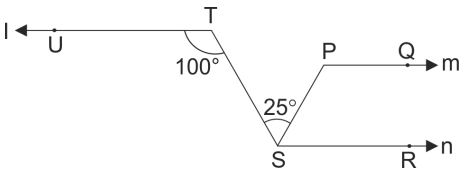


In the adjoining figure Ray BA || Ray DE , ∠C=50° and ∠D =100° find m∠ABC

Q.5 Solve the following question. (Any One) **(3)**

1)

In the figure, if line l || line m ||line n then find the measure ∠P.



2) Prove that, if a line is perpendicular to one of the two parallel lines, then it is perpendicular to the other line also.