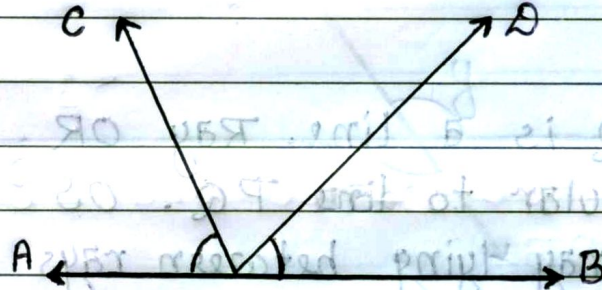


Important Questions (Lines and Angles)

Sub $\Rightarrow$ Maths class $\Rightarrow$ 9th

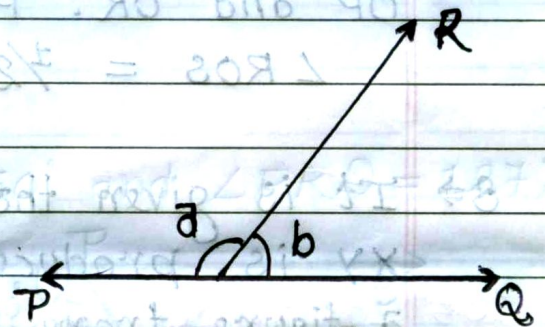
One mark Questions -

1 $\Rightarrow$ In the given figure $\angle AOC + \angle BOD = 80^\circ$, find $\angle COB$.

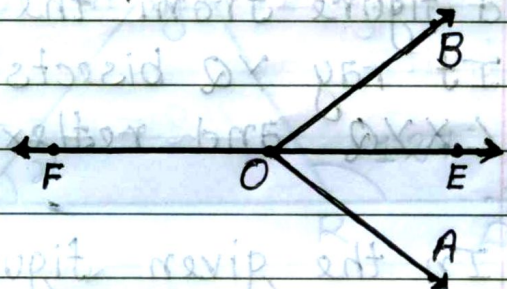


2 $\Rightarrow$ In the given fig. $\angle POR$ and $\angle QOR$ form a linear pair.

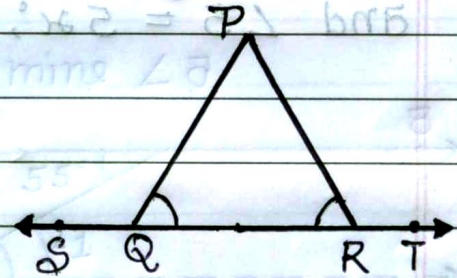
If $a - b = 80^\circ$, find the values of a and b .



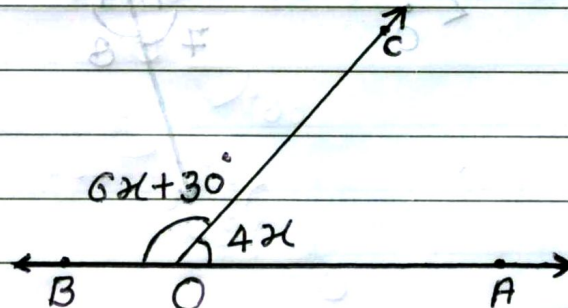
3 $\Rightarrow$ Ray OE bisects $\angle AOB$ and OF is the ray opposite to OE. Show that $\angle FOB = \angle FOA$



4 $\Rightarrow$ In fig. $\angle PQR = \angle PRQ$, then prove that $\angle PQS = \angle PRT$.

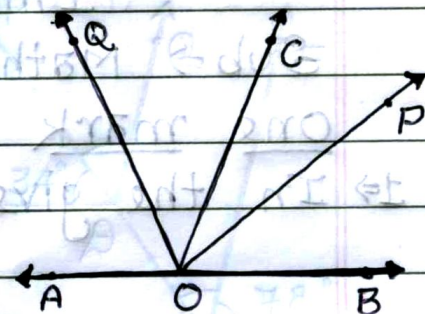


5 $\Rightarrow$ What value of x would make AOB a line in the given figure, if $\angle AOC = 4x$ and $\angle BOC = 6x + 30^\circ$?



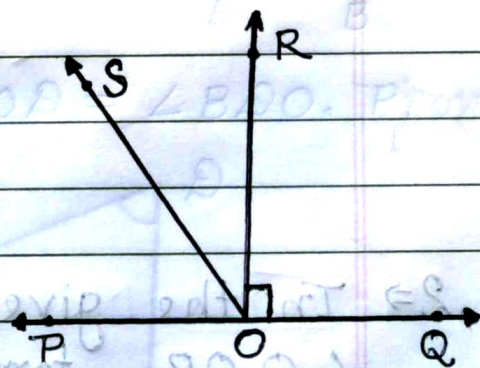
Two mark questions:-

6 $\Rightarrow$ In fig. if AOB is a line, OP bisects $\angle BOC$ and OQ bisects $\angle AOC$. Show that $\angle POQ$ is a right angle.

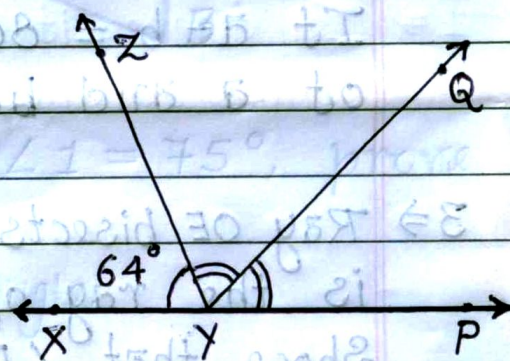


7 $\Rightarrow$ In fig. POQ is a line. Ray OR is perpendicular to line PQ . OS is another ray lying between rays OP and OR . Prove that,

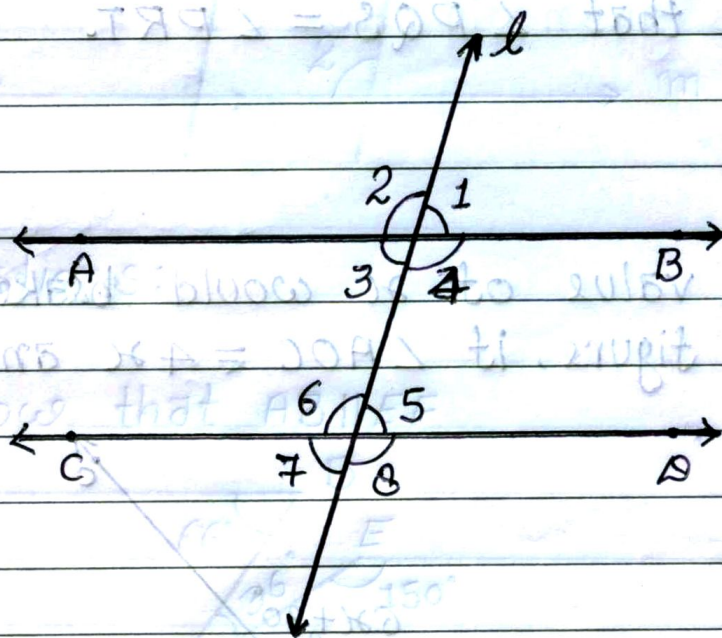
$$\angle ROS = \frac{1}{2} (\angle QOS - \angle POS)$$



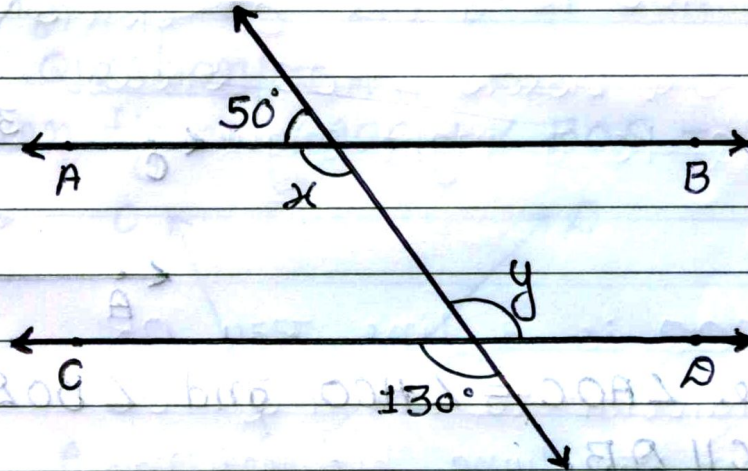
8 $\Rightarrow$ It is given that $\angle XYZ = 64^\circ$ and XY is produced to point P . Draw a figure from the given information. If ray YQ bisects $\angle ZYP$, find $\angle XYQ$ and reflex $\angle QYP$.



9 $\Rightarrow$ In the given figure $AB \parallel CD$. If $\angle 1 = (120 - x)^\circ$ and $\angle 5 = 5x^\circ$, find the measures of $\angle 1$ and $\angle 5$.

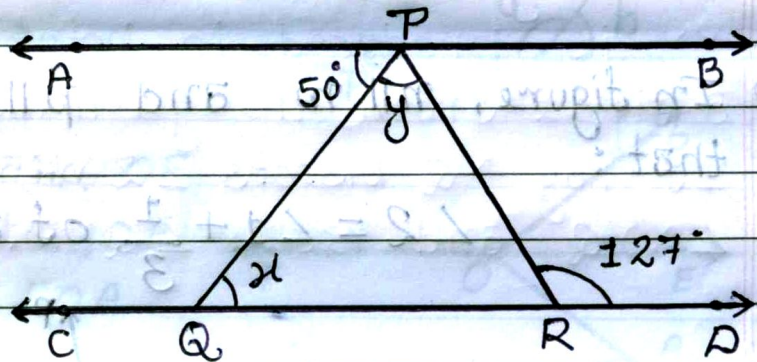


10 $\Rightarrow$ In fig. find the values of x and y and then show that $AB \parallel CD$

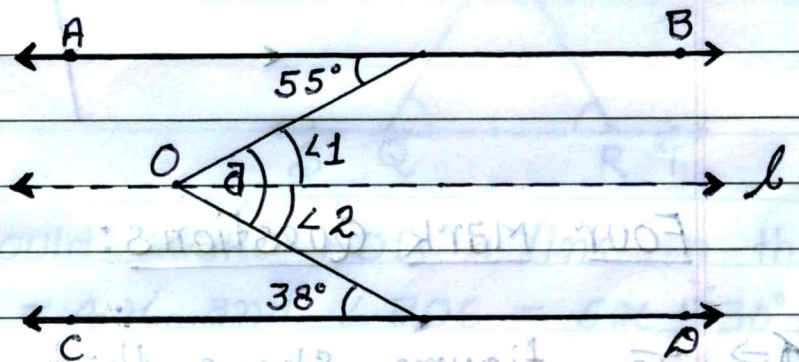


Three Mark Questions:

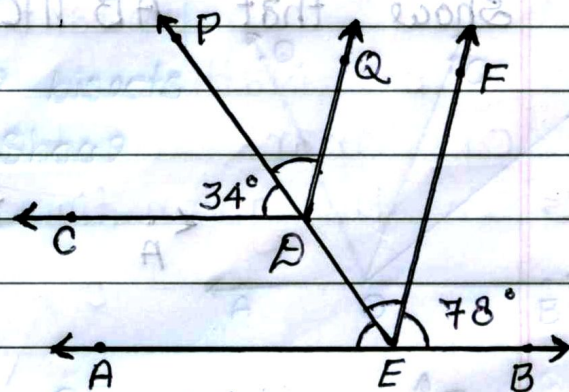
11 $\Rightarrow$ In figure, if $AB \parallel CD$, $\angle APQ = 50^\circ$ and $\angle PRD = 127^\circ$, find x and y .



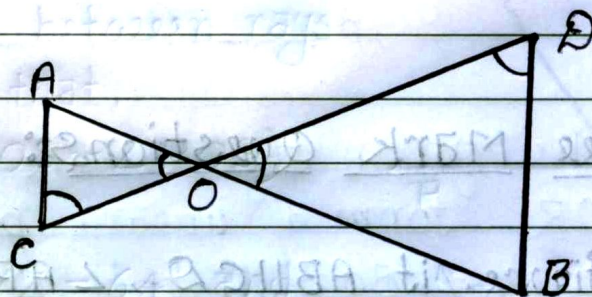
12 $\Rightarrow$ In the given fig, $AB \parallel CD$. Determine $\angle a$



13 $\Rightarrow$ In figure, $AB \parallel CD$ and $EF \parallel PQ$. Determine $\angle PDQ$, $\angle AED$ and $\angle DEF$.

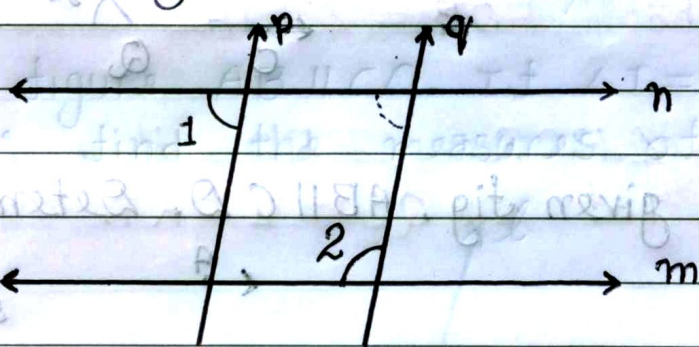


14 $\Rightarrow$ In figure, $\angle AOC = \angle ACO$ and $\angle BOA = \angle BAO$. Prove that $AC \parallel DB$.



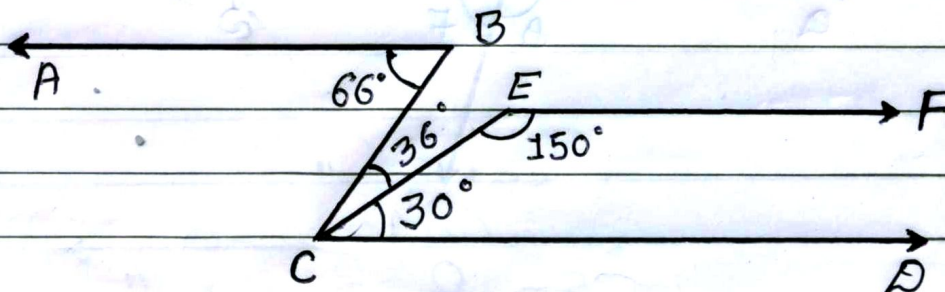
15 $\Rightarrow$ In figure, $m \parallel n$ and $p \parallel q$. If $\angle 1 = 75^\circ$, prove that:

$$\angle 2 = \angle 1 + \frac{1}{3} \text{ of a right angle.}$$

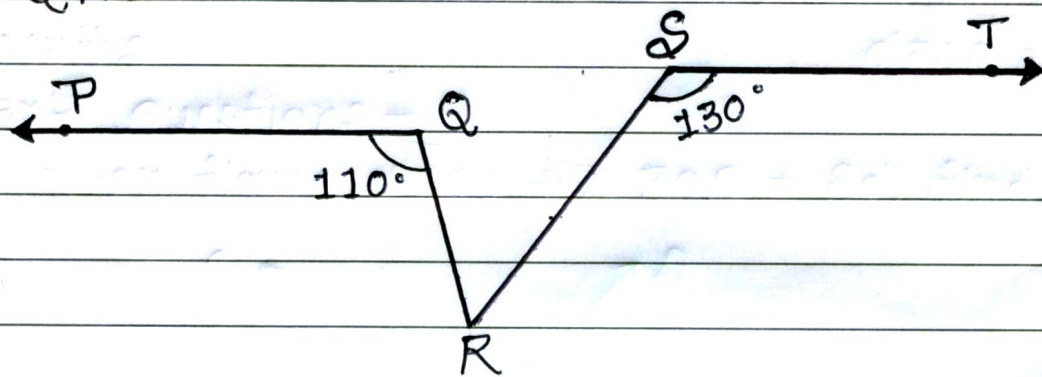


Four Mark Questions:

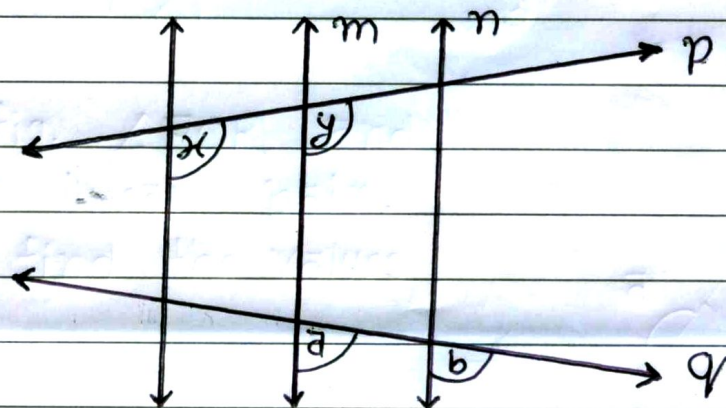
16 $\Rightarrow$ In figure, show that $AB \parallel EF$



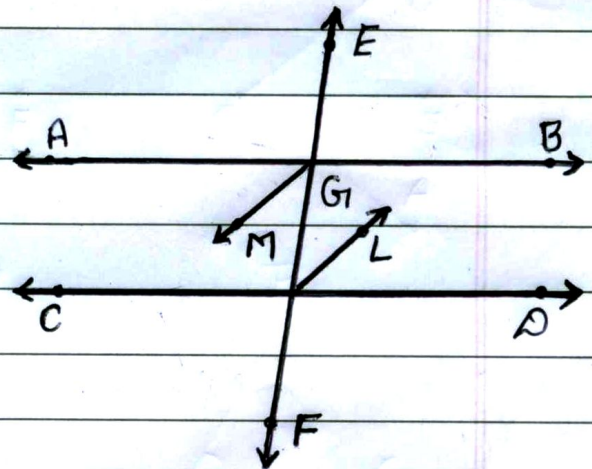
17 $\Rightarrow$ In fig., if $PQ \parallel ST$, $\angle PQR = 110^\circ$ and $\angle RST = 130^\circ$, find $\angle QRS$.



18 $\Rightarrow$ In fig if $x = y$ and $a = b$, prove that $r \parallel n$.



19 $\Rightarrow$ In fig. bisectors of $\angle GMH$ and $\angle HLN$ of alternate angles $\angle AGH$ and $\angle DHG$ respectively are parallel to each other. Prove that $AB \parallel CD$.



20 $\Rightarrow$ In fig. m and n are two plane mirrors perpendicular to each other. Prove that the incident ray CA is parallel to reflected ray BD .

