BHARATIYA VIDYA BHAVANS PUBLIC SCHOOL

(VIDYASHRAM) , Jubilee Hills

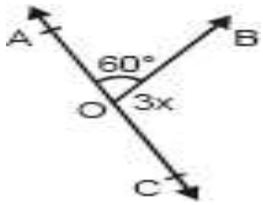
REVISION WORK SHEET KEY

CLASS : IX

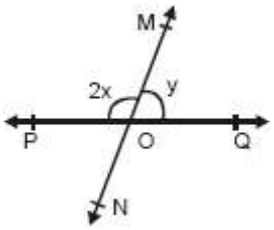
SUB: MATHEMATICS

TOPIC: LINES AND ANGLES

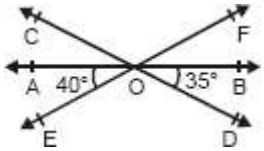
1) Solution: L AOB= 60, 3X+ L AOB = 180 (linear pairs), 3x +60 = 180. X=120/3 =40^0



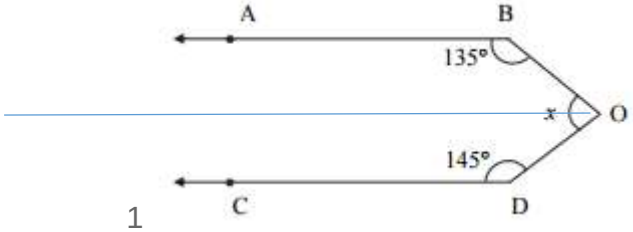
2. Solution: In the given figure, $\overline{PQ}$ and $\overline{MN}$ intersect at O. (a) Determine y, when x = 60
(b) Determine x, when y = 40
2x+y = 180 (linear pairs)
a) 2(60) +y =180, y = 60 b) 2x +40 = 180 , y=70^0



3. Solution: In the given figure, lines AB, CD and EF intersect at O.
1) AOC = BOD (V.O.A), AOC =35
II) BOF = AOE (V O A) , BOF =40, COA + COF +BOF =180 (ANGLES ON A STRAIGHT LINE)
COF = 180 –(35 +40) =105^0



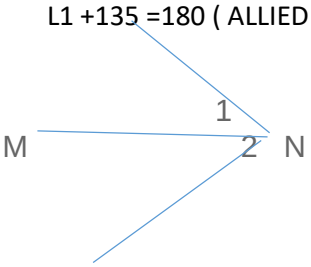
4) Solution: In the given figure AB || CD.



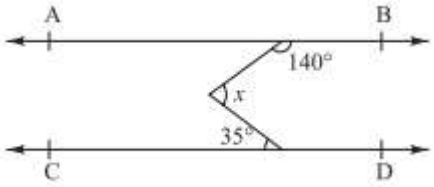
Draw a line MN parallel to AB and CD, X = L1 + L2, L1 +135 =180 (ALLIED ANGLES), L1 =45

L2 +145 = 180 (allied angles) , L2 = 35

X = L1 + L2 = 80 ^{0}



5) Solution: In the given figure, AB|| CD , the value of x is



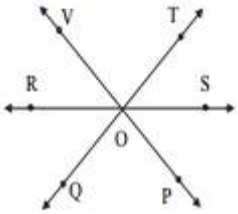
Draw a line parallel to AB and CD. ,x= L1+L2

L1 +140 =180 (Allied angles), L1= 40

L2 = 35 (Interior alternate angles),

X = 35 +40 =75^0

6) Solution: In the given figure, lines RS, VP and TQ intersect in point O, ∠VOS = 100°, ∠ROT = 122°.



VOR +VOS = 180 (Angles on a straight. Line)

VOR = 180-100 = 80

VOT =ROT-VOR =122 -80 =42,

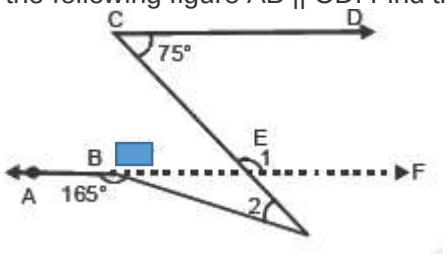
SOT = VOS – VOT = 100 -42 =58 , ROQ = SOT (V O A) =58^0

7) Given an angle be x =90 and 4/3 (90) = 120.

Supplement of 120 = 180- 120 = 60^0

8) Learn from ppt.

9) In the following figure AB || CD. Find the measure of ∠B EO and LOBE



O

L OBE = 180 – 165 (LINEAR PAIRS) = 15

LE= 180- 75 (ALLIED ANGLES) =105

LBEO =LE (V O A) = 105^0

10) Find the measure of an angle which is 26° more than its compliment.

Let the angle be x and its complement be 90-x. But, given that (90-x) +26 =x

$2x = 116^0$, $x = 58^0$