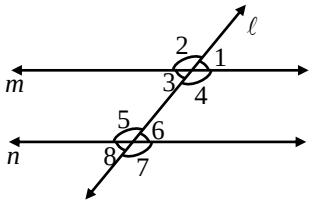
LINES AND ANGLES

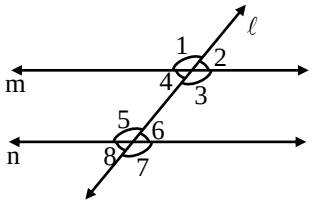
PARALLEL LINE, TRANSVERSAL LINE AND THEIR THEOREM

EXERCISE

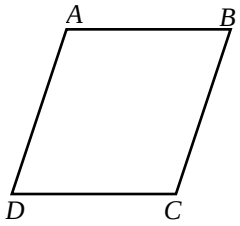
Q.1 In figure m || n and $\angle 1 = 65^{\circ}$. Find $\angle 5$ and $\angle 8$.



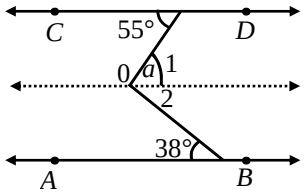
Q.2 In figure m || n and angles 1 and 2 are in the raito 3 : 2. Determine all the angles from 1 to 8.



Q.3 In figure AB || DC and AD || BC. Prove that $\angle DAB = \angle DCB$.

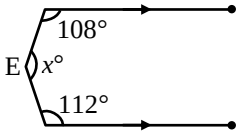


Q.4 In figure AB || CD. Determine $\angle a$

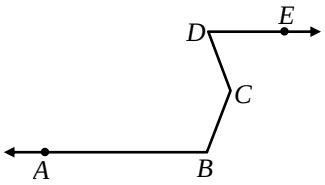


Q.5 In figure AB || CD. Determine X.

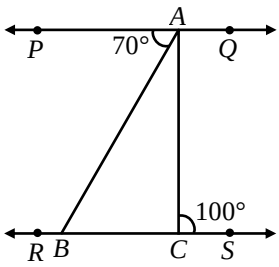
Q.6 In figure AB || CD. Find the value of x.



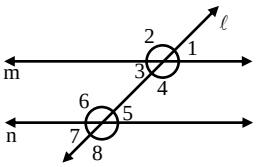
Q.7 In Figure AB || DE. Prove that $\angle ABC + \angle BCD = 180º + \angle CDE$.



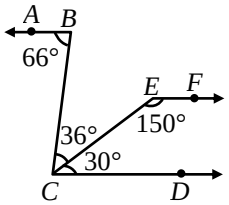
Q.8 In Figure PQ || RS, $\angle PAB = 70º$ and $\angle ACS = 100º$. Determine $\angle ABC$, $\angle BAC$ and $\angle CAQ$.



Q.9 In Figure if $\angle 2 = 120º$ and $\angle 5 = 60º$, show that m || n.



Q.10 In figure show that AB || EF.



ANSWER KEY

1. $\angle 5 = 115^{\circ}$ and $\angle 8 = 65^{\circ}$.

2. $\angle 1 = 108^{\circ}$, $\angle 2 = 72^{\circ}$, $\angle 3 = 108^{\circ}$, $\angle 4 = 72^{\circ}$, $\angle 5 = 108^{\circ}$ $\angle 6 = 72^{\circ}$, $\angle 7 = 108^{\circ}$ and $\angle 8 = 72^{\circ}$.

4. $\angle a = 93^{\circ}$

5. $x = 285^{\circ}$

6. $x = 140^{\circ}$

8. $\angle ABC = 70^{\circ}$, $\angle BAC = 30^{\circ}$ and $\angle CAQ = 80^{\circ}$.