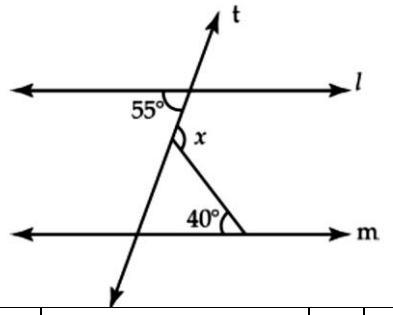
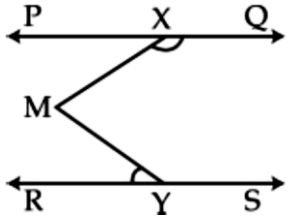
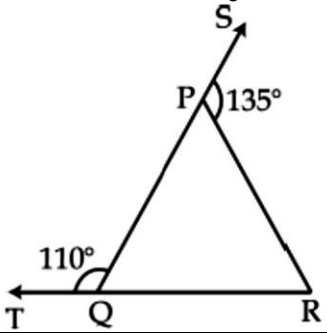
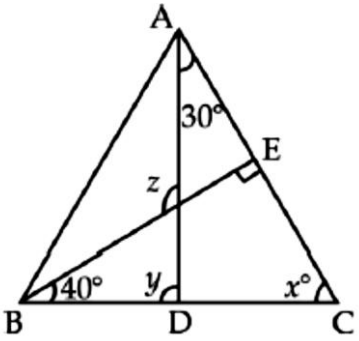
INDIAN SCHOOL AL WADI AL KABIR

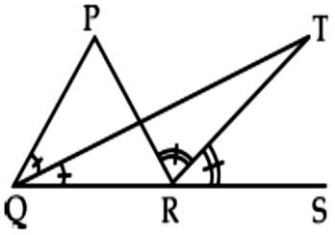
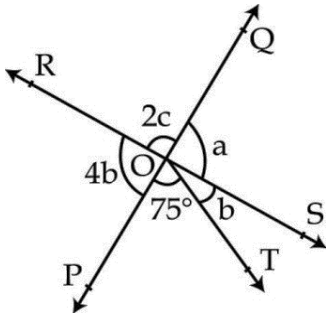
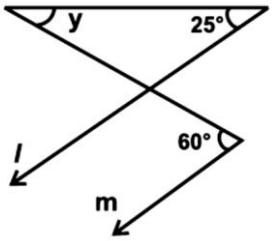
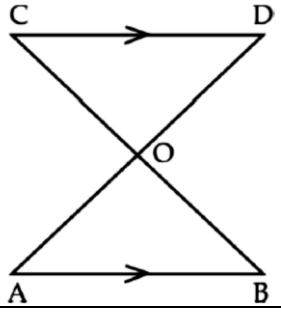
Class IX, Mathematics ***Revision worksheet –Mid Term***

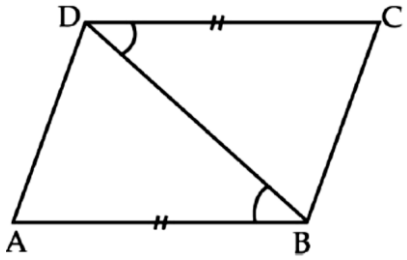
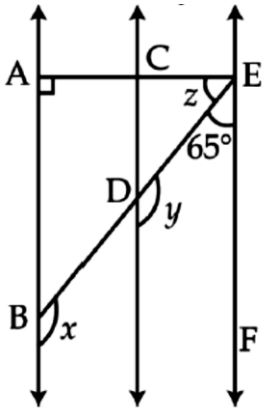
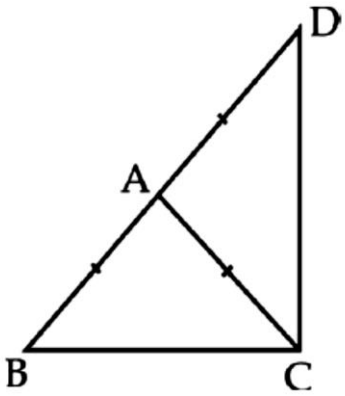
14-09-2020

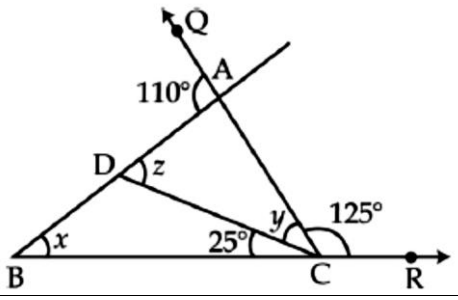
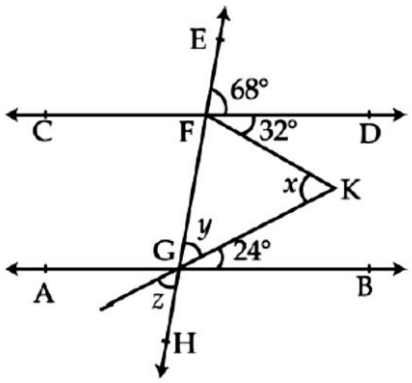
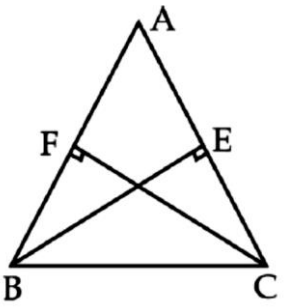
Q.1.	If two complementary angles are (3x + 10) and (7x – 20) then the angles are							
	A	60°, 30°	B	40°, 50°	C	80°, 100°	D	90°, 90°
Q.2.	The angle which is half its supplement is							
	A	80°	B	120°	C	60°	D	40°
Q.3.	If one angle of a linear pair is acute, then the other angle will be							
	A	obtuse	B	right	C	straight	D	reflex
Q.4.	In the figure if l ‖ m, then the value of x is 							
	A	55°	B	40°	C	15°	D	95°
Q.5.	In the isosceles ΔABC if AB =AC and ∠A = 40°, then find the measure of ∠B.							
	A	40°	B	75°	C	70°	D	140°
Q.6.	If in a triangle ABC, ∠A +∠B = 105°, ∠B + ∠C = 120°, then ∠B is							
	A	70°	B	75°	C	45°	D	60°
Q.7.	The supplement of $\frac{4}{3}$ of a right angle is							
	A	120°	B	60°	C	30°	D	45°

Q.8.	An angle is 20º more than three times the given angle. If the two angles are supplementary the angles are:							
	A	20º, 160º	B	40º, 140º	C	60º, 120º	D	70º, 110º

Q.9.	In the given figure if PQ‖RS, ∠MXQ = 125° and ∠MYR = 30°, find ∠XMY. 	85º
Q.10.	In the given figure QP and RQ of Δ PQR are produced to points S and T respectively. If ∠SPR = 135° and ∠ PQT = 110° then find ∠ PRQ. 	65º
Q.11.	Prove that the sum of the angles of a triangle is 180°.	
Q.12.	In ΔABC, BE⊥AC, ∠EBC = 40° and ∠DAC = 30°. Find the values of x, y and z. 	x =50º y =80º z =120º
Q.13.	If a transversal intersects two lines such that the bisectors of a pair of corresponding angles are parallel, then prove that the two lines are parallel.	

Q.14.	In the given figure, the side QR of a triangle PQR is produced to a point S. If the bisectors of ∠PQR and ∠PRS meet at a point T, prove that ∠QTR = $\frac{1}{2}$ ∠QPR.  	
Q.15.	In the given figure, two straight lines PQ and RS intersect each other at O. If ∠POT = 75°, find the values of a, b, c.  	a =84° b =21° c =48°
Q.16.	In the given figure, l ‖ m. Find the measure of y.  	y =35°
Q.17.	In the figure, AB ‖ CD. O is the mid-point of AD. Show that (i) Δ AOB ≅ Δ DOC (ii) O is mid-point of BC.  	

Q.18.	In the figure, AB = CD and ∠ ABD = ∠CDB. Prove that AD = BC. 	
Q.19	In the given figure, AB ∥ CD and CD ∥ EF. Also EA ⊥ AB and ∠ BEF = 65°. Find the values of x, y and z. 	x =115º y =115º z =25º
Q.20.	In ΔABC, BO and CO are the bisectors of ∠B and ∠C respectively intersecting each other at O. Prove that ∠BOC = 90° + $\frac{1}{2}$ ∠A.	
Q.21.	ΔABC is an isosceles triangle in which AB = AC. Side BA is produced to D such that BA = AD. Show that ∠ BCD is a right angle. 	

Q.22.	In the given figure, if $\angle BCD = 25^0$, $\angle BAQ = 110^0$ and $\angle ACR = 125^0$, then find the values of x, y and z.  	x =55º y =30º z =80º
Q.23.	Prove that if two lines intersect each other, then the vertically opposite angles are equal.	
Q.24.	In figure if AB ‖ CD, then find the values of x, y and z.  	x =56º y =44º z =44º
Q.25.	ABC is a triangle in which altitudes BE and CF are equal. Prove that (i) $\Delta ABE \cong \Delta ACF$ (ii) AB = AC  	
Q.26.	Prove that the angles opposite to equal sides of an isosceles triangle are equal.	

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