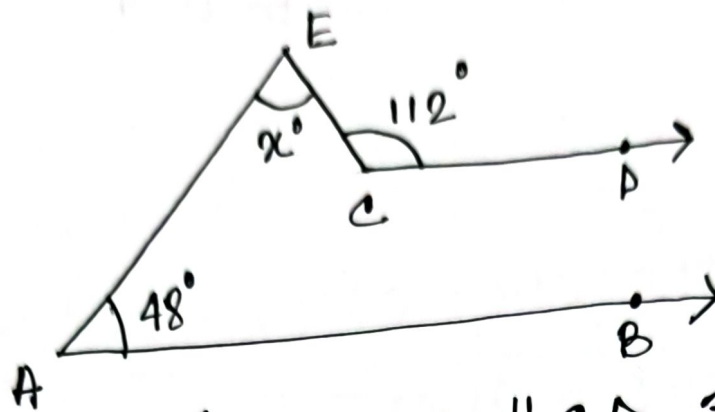


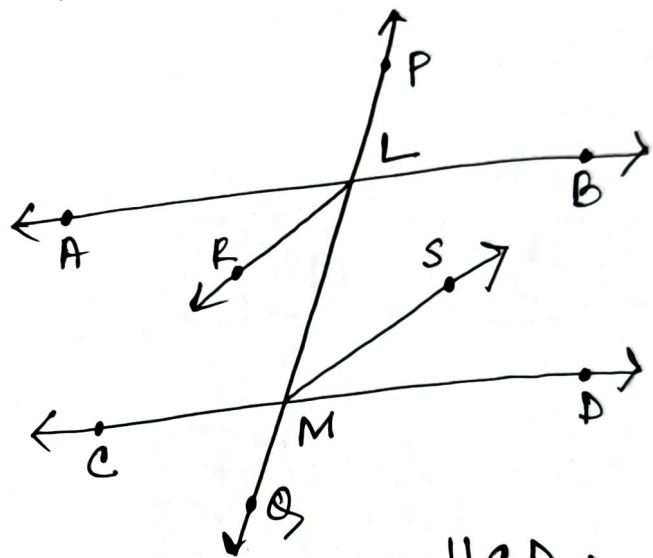
Revision Worksheet

<1>

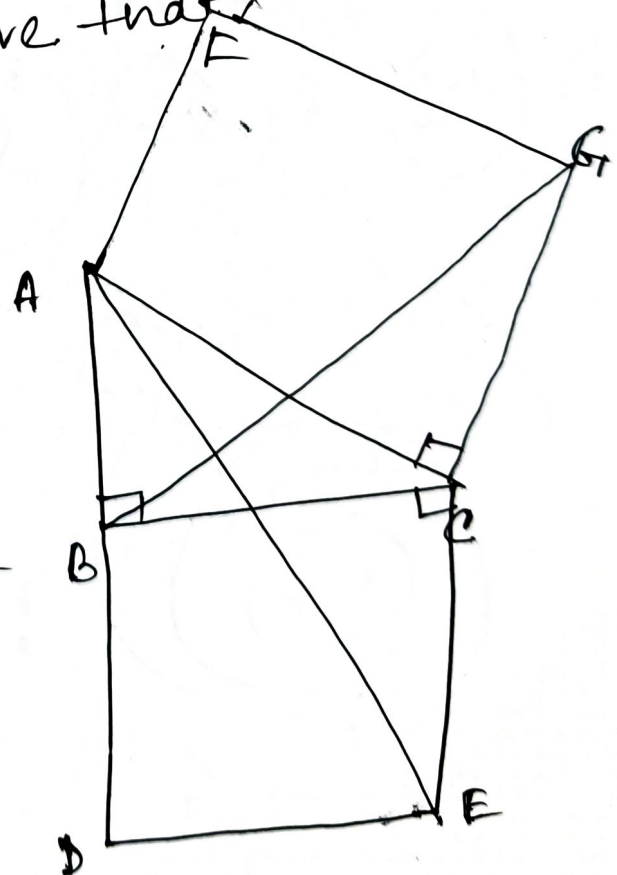


In the above figure, $AB \parallel CD$, find the value of x .

<2> In the adjoining fig., LR and MS are parallel to each other and they are also bisectors of $\angle ALM$ & $\angle LMD$ respectively. Prove that $AB \parallel CD$.

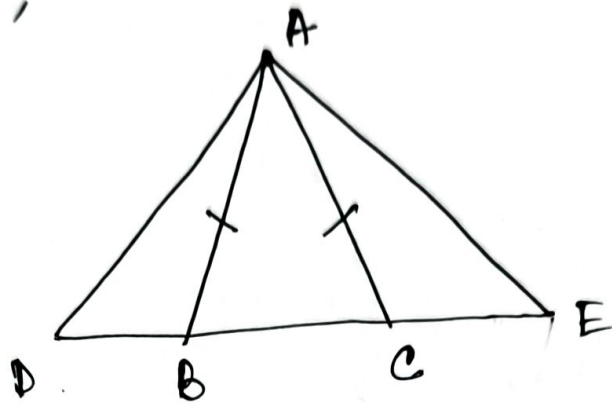


<3> In the given fig., $\triangle ABC$ is a right angled triangle. $BDEF$ is a square on side BC and $ACGF$ is a square on the side AC. Prove that, $AE = BG$.



<4> In the given fig, $AB = AC$ and $\angle DAB = \angle EAC$.

Prove that, $AD = AE$



<5> If $a + b + c = 5$ and $ab + bc + ca = 10$, then prove that, $a^3 + b^3 + c^3 - 3abc = -25$.

<6> Simplify:

$$\frac{(25y^2 - 16z^2)^3 + (16z^2 - 9x^2)^3 + (9x^2 - 25y^2)^3}{(5y - 4z)^3 + (4z - 3x)^3 + (3x - 5y)^3}$$

<7> If $x = \frac{1}{5 + 3\sqrt{3}}$ and $y = \frac{1}{5 - 3\sqrt{3}}$,

show that —

$$xy^2 + x^2y = \frac{5}{2}$$