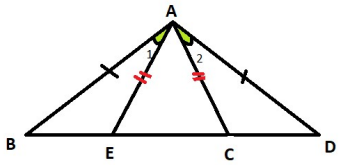
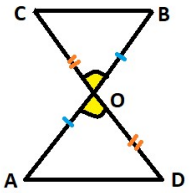
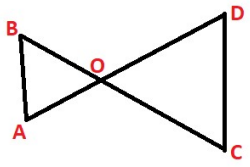
1. In ΔABC, AB = AC and exterior angle ∠ACD = 120° , find ∠B



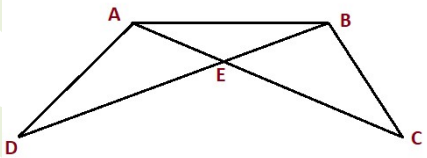
2. In the figure above AB = AD, AE = AC and ∠1=∠2.Prove that$\Delta ABC \cong \Delta ADE$



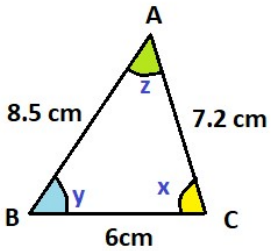
3. In Fig above OA = OB and OD = OC. Show that (i) $\Delta AOD \cong \Delta BOC$ and (ii) AD || BC



4. In the figure above∠B $<$ ∠A and ∠C $<$ ∠D. Show that AD < BC
5. Prove that: if two sides of a triangle are equal then the angles opposite to these are also equal.



6. In the given figure above, $\angle EAB = \angle EBA \; and \; AC = BD$. Prove that AD = BC



7. In the given figure, AB = 8.5 cm, BC = 6 cm, CA = 7.2 cm. Write x, y, z in ascending order.