## Triangles

1) Draw a rough sketch of $\triangle \mathrm{PQR}$ in which PS is an altitude interior of triangle.
2) $\triangle \mathrm{XYZ}$ is right angled a $X$, where the three altitudes meet?
3) Two angles of a triangle are $30^{\circ}$ and $70^{\circ}$, Find the third angle.
4) In a triangle measures of two angles are equal and third angle is $40^{\circ}$. What are the measures of the equal angles?
5) Measures of two angles of a triangle are equal and third angle is thrice the measure of one of the equal angles. Find the measures of the angles of the triangle.
6) The angles of a triangle are in the ratio 1:3:5, find the angles of the triangle.
7) Exterior angle of a triangle is $120^{\circ}$ and one of its opposite interior angle is $70^{\circ}$, find the measure of the other two angles.
8) From the figure find the value of $x$.

(i)

(ii)
9) Find the value of Y from the following figure, if $\mathrm{PQ}=\mathrm{PR}$ and $\mathrm{QS}=\mathrm{QR}\left\llcorner\mathrm{QPR}=30^{\circ}\right.$;

10) In figure $L A=70^{\circ}$, $\left\llcorner C B A=70^{\circ}\right.$. Find $x$ and $y$.
11) In figure $\left\llcorner P=30^{\circ}\right.$, $\left\llcorner P E F=70^{\circ}\right.$ and $E F \| Q R$. Find $\llcorner Q$ and $\llcorner R$.

