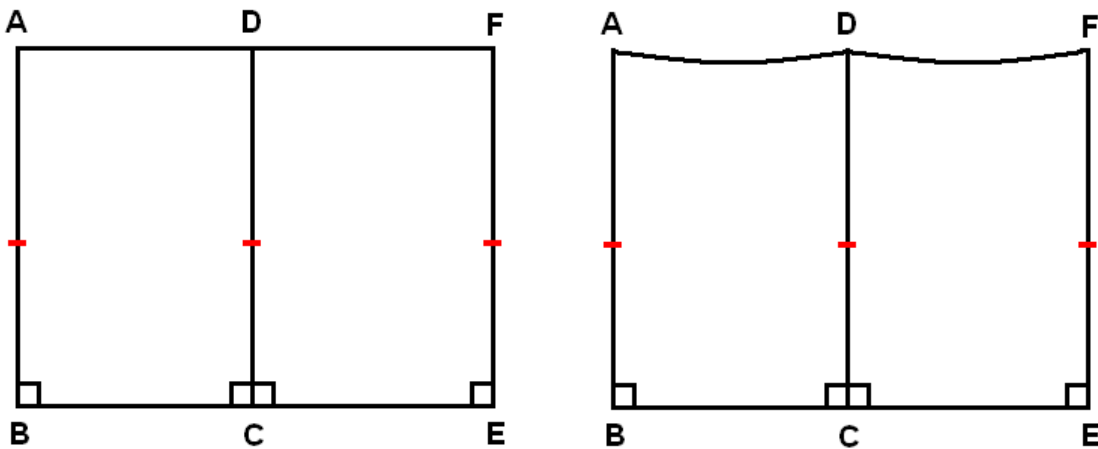
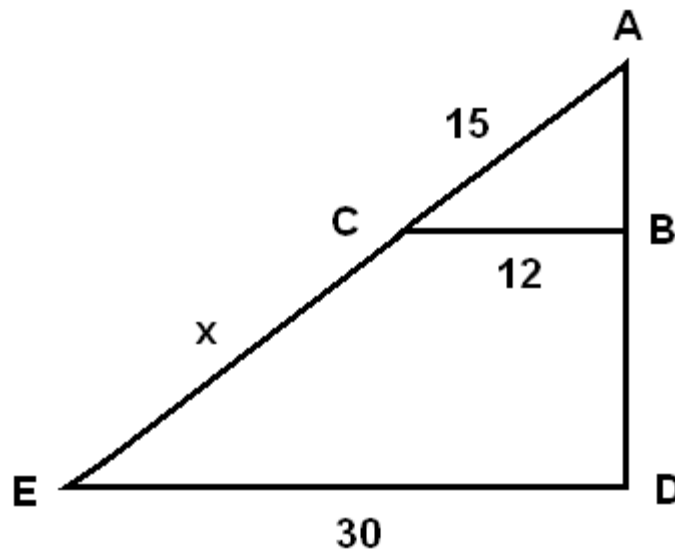


## Drawing for the third problem group

2. Here are two Saccheri quadrilaterals sharing a common side, with the left hand picture in Euclidean geometry and the right hand picture in hyperbolic geometry. In the latter we have curved the top edge to reflect the fact that the top angles are acute.



3. The goal is to solve for the length  $x$  in this picture.



4. Once again the goal is to solve for the length  $x$  in the picture. The pairs of angles shaded in the same color are alternate interior angles. Find another pair of such angles and also a pair of vertical angles.

