


1. The rectangular hyperbola $H$ has Cartesian equation $x y=64$. The line $l$ with equation $x+2 y-36=0$ intersects the curve at the points $P$ and $Q$.
a) Find the coordinates of $P$ and $Q$.
b) Find the equation of the perpendicular bisector of $P Q$ in the form $y=m x+c$.
