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I assigned the variable P to the distance between the observer and the wall and then obtained equations for the two red lines (the ones which form the angle theta, $(p^2 + (h+d)^2)^{1/2}$ and $(p^2 + d^2)^{1/2}$). So now I have all three sides of the triangle involving theta. I tried getting an equation for theta using law of cosines, but I end up getting something which would be extremely tedious to differentiate. Is there a better way of doing this problem?