$4tg3y = 3tg2x$
$2sinx*cos(x-y) = siny$

$4tg(2y+y)=3tg2x$
$4(tg2y+tgy)/(1-tg2ytgy)=3tg2x$

$2sinx*cos(x-y) = siny$
$2sinx(cosx*cosy+siny*sinx)=siny$
$2sinxcosxcosy+2sin^2xsiny=siny$

$sin2xcosy-cos2xsiny+siny=siny$
$sin2xcosy-cos2xsiny=0$
$sin(2x-y)=0$
$2x-y=pk$
$2x=pk+y$

$tg2x=tg(pk+y)$
$tg2x=tgy$
$4(tg2y+tgy)/(1-tg2ytgy)=3tgy$
$4(2tgy/(1-tg^2y)+tgy)/(1-2tgytgy/(1-tg^2y))=3tgy$
$tgy=t$
$4(2t/(1-t^2)+t)/(1-2t^2/(1-t^2))=3t$
$4((2t+t-t^3)/(1-t^2))/((1-t^2-2t^2)/(1-t^2))=3t$
$4((3t-t^3)/(1-t^2))/((1-3t^2)/(1-t^2))=3t$
$(12t-4t^3)/(1-t^2)*(1-t^2)/(1-3t^2)=3t$
$(12t-4t^3)/(1-3t^2)=3t$
$(12t-4t^3-3t+9t^3)/(1-3t^2)=0$
$5t^3+9t=0$
$t(5t^2+9)=0$
$t=0$
$tgy=0$
$y=pn$
$x=(pk+pn)/2$
Ответ:$((pk+pn)/2;pk)$

$tg2x=sin2x/cos2x=2sinxcosx/1-2sin^2x=2tgx/1+tg^2x-2tg^2x=$
$2tgx/(1-tg^2x)$
$tg(x+y)=sin(x+y)/cos(x+y)=(sinxcosy+sinycosx)/(cosxcosy-sinysinx)=$
$=(tgx+tgy)/(1-tgxtgy)$