sin(x+y)=sinx*cosy + cosx*siny
sin(x-y)=sinx*cosy - cosx*siny
cos(x+y)=cos x*cos y-sin x*sin y
cos(x-y)=cos x*cos y+sin x*sin y

sina + sinb = ????
sina - sinb = ????
cosa + cosb = ????
cosa - cosb = ????

sin(x+y)+sin(x-y)=sinx*cosy+cosx*siny+sinx*cosy-cosx*siny=2*sinx*cosy
{x+y=a
{x-y=b
y=a-x
x-(a-x)=b
2x-a=b
2x=a+b
x=(a+b)/2
y=a-x
y=a-(a+b)/2
y=(2a-a-b)/2
y=(a-b)/2
sina+sinb=2*sin((a+b)/2)*cos((a-b)/2)
sin(x+y)-sin(x-y)=sinx*cosy+siny*cosx-sinx*cosy+siny*cosx=2*siny*cosx
a=x+y
b=x-y
x=(a+b)/2
y=(a-b)/2
sina-sinb=2*sin((a-b)/2)*cos((a+b)/2)
cos(x+y)+cos(x-y)=cosx*cosy-sinx*siny+cosx*cosy+sinx*siny=2*cosx*cosy
x+y=a
x-y=b
x=(a+b)/2
y=(a-b)/2
cosa*cosb=2*cos((a+b)/2)*cos((a-b)/2)
cos(x+y)-cos(x-y)=cosx*cosy-sinx*siny-cosx*cosy-sinx*siny=-2*sinx*siny
x=(a+b)/2
y=(a-b)/2
cosa-cosb=-2*sin((a+b)/2)*sin((a-b)/2)