sin(α+β)=sinαcosβ +cosαsinβ
sin(α-β)=sinαcosβ-cosαsinβ
cos(α+β)=cosαcosβ-sinαsinβ
cos(α-β)=cosαcosβ+sinαsinβ
tg(α+β)=(tgα+tgβ)/(1-tgαtgβ)
tg(α-β)=(tgα-tgβ)/(1+tgαtgβ)

sin(2a)=2sin(a)cos(a);
cos(2a)=cos^2(a)-sin^2(b)=1-2sin^2(a);
tg(2a)=2tg(a)/1-tg^2(a);
ctg(2a)=ctg^2(a)-1/2ctg(a);
sin(3a)=3sin(a)-4sin^3(a);
tg(3a)=3tg(a)-tg^3(a)/1-3tg^2(a);
ctg(3a)=3ctg(a)-ctg^3(a)/1-3ctg^2(a);

sin^2(a/2)=1-cos(a)/2;
cos^2(a/2)=1+cos(a)/2;
tg^2(a/2)=1-cos(a)/1+cos(a);
ctg^2(a/2)=1+cos(a)/1-cos(a);
tg(a/2)=sin(a)/1+cos(a)=1-cos(a)/sin(a);
ctg(a/2)=sin(a)/1-cos(a)=1+cos(a)/sin(a);

sin(a)+sin(b)=2sin(a+b/2)cos(a-b/2);
sin(a)-sin(b)=2sin(a-b/2)cos(a+b/2);
cos(a)+cos(b)=2cos(a+b/2)cos(a-b/2);
cos(a)-cos(b)=-2cos(a+b/2)cos(a-b/2)=2cos(a+b/2)cos(b-a/2);
cos(a)+sin(b)=sqrt(2)cos(45-a);
cos(a)-sin(b)=sqrt(2)sin(45-a);
tg(a)+tg(b)=sin(a+b)/cos(a)cos(b);
tg(a)-tg(b)=sin(a-b)/cos(a)cos(b);
ctg(a)+ctg(b)=sin(a+b)/sin(a)sin(b);
ctg(a)-ctg(b)=sin(b-a)/sin(a)sin(b);
tg(a)+ctg(b)=cos(a-b)/cos(a)sin(b);
tg(a)-ctg(b)=-cos(a+b)/cos(a)sin(b);
tg(a)+ctg(a)=2/sin(2a);
tg(a)-ctg(a)=-2ctg(2a);

sin(a)sin(b)=1/2(cos(a-b)-cos(a+b));
cos(a)cos(b)=1/2(cos(a+b)+cos(a-b));
sin(a)cos(b)=1/2(sin(a+b)+sin(a-b));

sin(a)=2tg(a/2)/1+tg^2(a/2);
cos(a)=1-tg^2(a/2)/1+tg^2(a/2);
tg(a)=2tg(a/2)/1-tg^2(a/2);
ctg(a)=1-tg^2(a/2)/2tg(a/2);