sin(arcctgx)=?
arcctgx =t t э (0;P)
1/sin^2t=1+ctg^2t
sint=+-V(1/(1+ctg^2x)=+-V(1/(1+x^2)
sint=V(1/(1+x^2)

cos(arcsinx)=?
arcsinx=t t э [-P/2;P/2]
cost=+-V(1-sin^2t)=+-V(1-x^2)
cost=V(1-x^2)

cos(arctgx)=?
arctgx=t t э (-P/2;P/2)
tgt=x
1+tg^2 x= 1/cos^2 x
cos t=+_V(1/(1+tg^2 t))=+_V(1/(1+x^2 t))
cost=V(1/(1+x^2))

cos(arcctgx)=?
arcctgx=t tэ(0;P)
ctgt=x
tgt=1/x
cos t=+_V(1/1+tg^2 t)=+-V(1/(1+1/x^2))=
+-V(x^2/(x^2+1))
при t э (0;P/2) cost>0 cost=V(x^2/(x^2+1))
=|x|/V(x^2+1)=x/V(x^2+1)
при t э [P/2;P) cost<0 cost=-V(x^2/(x^2+1))
=-|x|/V(x^2+1)=x/V(x^2+1)

tg(arcsinx)=?
arcsinx=t tэ [-P/2;P/2]
sint=x
1+1/tg^2t=1/sin^2t
tg^2t=1/(1/sin^2t-1)=sin^2t/(1-sin^2t)
tgt=+-V(sin^2t/(1-sin^2t))=+-V(x^2/(1-x^2))
при tэ[-P/2;0] tgt<0 tgt=-V(x^2/(1-x^2))=
=-|x|/V(1-x^2)=x/V(1-x^2)
при tэ(0;P/2] tgt>0 tgt=V(x^2/(1-x^2))=
=|x|/V(1-x^2)=x/V(1-x^2)

tg(arccosx)=?
arccosx=t tэ[0;P]
cost=x
tgt=+-V(1/cos^2t-1)=+-V((1-cos^2t)/cos^2t)
tgt=V((1-x^2)/x^2)
при t э [0;P/2] tgt>0 tgt=V((1-x^2)/x^2)=
=V(1-x^2)/|x|=V(1-x^2)/x
при t э (P/2;P] tgt<0 tgt=-V((1-x^2)/x^2)=
=-V(1-x^2)/|x|=V(1-x^2)/x

tg(arcctgx)=?
arcctgx=t tэ(0;P)
ctgt=x
tgt=1/ctgt=1/x

ctg(arcsinx)=?
arcsinx=t tэ[-P/2;P/2]
sint=x
ctgt=+-V(1-sin^2t)/|sint|
при t э [-P/2;0] ctgt<0 ctgt=
=-V(1-sin^2t)/|sint|=
-V(1-x^2)/|x|=V(1-x^2)/x
при t э [0;P/2] ctgt>0 ctgt=
=V(1-sin^2t)/|sint|=
V(1-x^2)/|x|=V(1-x^2)/x

ctg(arccosx)=?
arccosx=t tэ[0;P]
cost=x
1/ctg^2t=1/cos^2t-1=(1-cos^2t
)/cos^2t
ctgt=+-|cost|/V(1-cos^2t))=
=+-|x|/V(1-x^2))
при tэ[0;P/2] ctgt>0
ctgt=|x|/V(1-x^2))=x/V(1-x^2))
при tэ[P/2;P] ctgt<0
ctgt=-|x|/V(1-x^2))=x/V(1-x^2))

ctg(arctgx)=?
arctgx=t tэ(-P/2;P/2)
tgt=x
ctgt=1/tgt=1/x