

[Help](#)

```
#ifndef _NUMFUNC_H
#define _NUMFUNC_H

#include "optype.h"

double Call(VAR *, double);
double Put(VAR *, double);
double CallSpread(VAR *, double);
double Butterfly(VAR *, double);
double Digit(VAR *, double);
double Zero(VAR *, double);
double Const(VAR *, double);
double ConstLim(VAR *, double);
double DigitSpecialPayoff(VAR *, double spot);

double BestOf(VAR *param, double spot1, double spot2);
double CallMax(VAR *param, double spot1, double spot2);
double Geom(VAR *param, double spot1, double spot2);
double Arim(VAR *param, double spot1, double spot2);
double PutMin(VAR *param, double spot1, double spot2);
double Exchange(VAR *param, double spot1, double spot2);
double Zero2d(VAR *param, double spot1, double spot2);
double Const2d(VAR *param, double spot1, double spot2);
double Call_2arg(VAR *param, double spot1, double spot2);
double Put_2arg(VAR *param, double spot1, double spot2);
double Call_OverSpot2(VAR *param, double spot1, double spot2);
double Put_OverSpot2(VAR *param, double spot1, double spot2);
double Call_StrikeSpot2(VAR *param, double spot1, double spot2);
double Put_StrikeSpot2(VAR *param, double spot1, double spot2);
double CallSpread2d(VAR *param, double spot1, double spot2);
double PutSpread2d(VAR *param, double spot1, double spot2);
double CallBasket_2d(VAR *param, double spot1, double spot2);
double PutBasket_2d(VAR *param, double spot1, double spot2);

double Minimum(VAR *param, double , double);
double Maximum(VAR *param, double , double);
double Asian(VAR *param, double, double);
```

```
double PutBasket_nd(VAR *param, const PnlVect *VStock);
double CallBasket_nd(VAR *param, const PnlVect *VStock);
double CallMultiSpread_nd(VAR *param, const PnlVect *VStock);
double PutMultiSpread_nd(VAR *param, const PnlVect *VStock);
double CallMax_nd(VAR *param, const PnlVect *VStock);
double PutMin_nd(VAR *param, const PnlVect *VStock);
double PutGeom_nd(VAR *param, const PnlVect *VStock);
double CallGeom_nd(VAR *param, const PnlVect *VStock);

#endif
```