```
dl, ul, pl, \psi dr, ur, pr
                                call riemann
            dl, pl, dr, pr
            calc cl, cr
   cl, cr
dl, ul, pl, cl, v dr, ur, pr, cr
          dl, ul, pl, cl,
                            call starpu
          dr, ur, pr, cr
               call guessp
                      pstart
      \sqrt{pold = pm} \sqrt{pold = pstart}
    dl, pl,\forallcl, pold dr, pr,\forallcr, pold
      call prefun
                       call prefun
        fl, fld
                          fr, frd
                  pold,
        fl, fld, vul, ur, v fr, frd
                 calc pm
                     pm
       pm, pold
                       fl, fr, ul, ur
         check
                          calc um
                              um
               pm,
                    um
call sample
                d, u, p
              d, u, p
```