```
(%i1) batch("revised_fairing.mac");
read and interpret file: #p/home/peterj/work/eilmer3/2D/convex-ramp/notes/revi
(%i2) a : 0.0026
(%i3) b : 0.0211
(%i4) g : a s^4 - b s^3
(%o4) 0.0026 s^4 - 0.0211 s^3
(%i5) dgds : diff(g , s , 1)
(%o5) 0.0104 s^3 - 0.0633 s^2
(%i6) d2gds2 : diff(g , s , 2)
(%o6) 0.0312 s^2 - 0.1266 s
(%i7) ev(soln : solve(d2gds2 = 0 , s), numer)
rat: replaced -0.1266 by -633/5000 = -0.1266
rat: replaced 0.0312 by 39/1250 = 0.0312
rat: replaced -0.1266 by -633/5000 = -0.1266
rat: replaced 0.0312 by 39/1250 = 0.0312
rat: replaced 6.0000000000000006E-4 by 3/5000 = 5.9999999999999995E-4
rat: replaced -4.05769230769231 by -211/52 = -4.05769230769231
(%o7) [s = 4.057692307692308 , s = 0]
(%i8) end_s : soln[1]
(%o8) s = 4.057692307692308
(%i9) ev(end_g : ev(g , s = end_s), numer)
(%o9) 0.0026 s^4 - 0.0211 s^3 = - 0.70483878619993
(%i10) ev(end_dgds : ev(dgds , s = end_s), numer)
(%o10) 0.0104 s^3 - 0.0633 s^2 = - 0.3474086908284
(%i11) ev(L : quad_qags(sqrt(dgds^2 + 1) , s , 0 , 4.0577), numer)
(%o11) [4.146768891838063 , 4.603838301517964 10^-14 , 21 , 0]
(%o11) revised_fairing.mac
```