

IIa.7.3

c This program calculates the mass flow rate for Example IIa.7.3

```
c
  implicit real*8(a-h,o-z)
  xi=0.1
1  continue
  i=i+1
  fofx=31.906562*32.2*xi-dlog(xi)-763.3913
  dfox=31.906562*32.2-(1./xi)
  xin=xi-(fofx/dfox)
  eps=(xin-xi)/xi
  if(abs(eps).le.1.e-18.or.i.gt.30) go to 2
  xi=xin
  write(*,3) i,xi,xin
  go to 1
2  continue
3  format(i5,2f12.4)
  stop
end
```