

```
1: program raiz
2: external func
3: open(15,file="11do02exe2.txt")
4: a = 31 ! rodar novamente com a = 52
5: call graiz(func, a)
6: end
7:
8: subroutine graiz(func, a)
9: real TOLX, dx, x, FOLD, func
10: external func
11: TOLX = 1.E-4
12: X = .1
13: FOLD = func(x,a)
14: DX = .5
15: ITER = 0.0
16: 10 continue
17:     ITER = ITER + 1
18:     X = X + DX
19:     write(15,*) ITER, X
20:     if ((FOLD*FUNC(X,a)) .LT. 0) then
21:         X = X - DX
22:         DX = DX/2
23:     END IF
24:     if (ABS(DX) .GT. TOLX) GOTO 10
25: STOP
26: return
27: end
28:
29: real function func(x,a)
30: real x, a
31: func = x*cos(x) + (x**3)*sin(x) + (x - a)
32: end
```