$\overline{ {f Algorithm} \ {f 1} \ { m Gradienten methode} \ { m - Implementierung} }$

```
1: F(x) = (x^2-2)^2

2: F'(x) = 4x^3-8x

3:

4: x = 10.0

5: \lambda = 0.001

6: for i = 8 do

7: \lambda = \lambda + (i*0.001)

8: for j = 8 do

9: x = x - \lambda * F'(x)

10: Print x
```