

```

>
> # Define the iteration function f(x)
f := x → evalf(
  x - (
    (289 * x^4 - 1938 * x^3 + 1464 * x^2 + 4642 * x + 1815)
    * (1156 * x^3 - 5814 * x^2 + 2928 * x + 4642)
  ) / (
    (1156 * x^3 - 5814 * x^2 + 2928 * x + 4642)^2
    - (289 * x^4 - 1938 * x^3 + 1464 * x^2 + 4642 * x + 1815)
    * (3468 * x^2 - 11628 * x + 2928)
  )
);

# Starting value
x0 := 0.8;

# Iterate 4 times
x1 := f(x0);
x2 := f(x1);
x3 := f(x2);
x4 := f(x3);

# Print results
x1, x2, x3, x4;

f := x → evalf(x - ((289 · x4 - 1938 · x3 + 1464 · x2 + 4642 · x + 1815) · (1156 · x3 - 5814 · x2
+ 2928 · x + 4642)) / ((1156 · x3 - 5814 · x2 + 2928 · x + 4642)2 - (289 · x4 - 1938 · x3
+ 1464 · x2 + 4642 · x + 1815) · (3468 · x2 - 11628 · x + 2928)))
x0 := 0.8
x1 := 0.234125339342916825644305489601
x2 := -0.383336252616825855868055264481
x3 := -0.629278589006114805152491425953
x4 := -0.646986889340648450199367451912
0.234125339342916825644305489601, -0.383336252616825855868055264481,
-0.629278589006114805152491425953, -0.646986889340648450199367451912
> (: Done

```

(1)