# CoCoALib - Feature #1131

### Sturm sequence

29 Nov 2017 21:35 - John Abbott

Status:	Closed	Start date:	29 Nov 2017
Priority:	Normal	Due date:	
Assignee:	John Abbott	% Done:	100%
Category:	New Function	Estimated time:	4.44 hours

Spent time:

4.20 hours

# Description

Target version:

Added fn to compute a Sturm Seq, and to count the number of real roots (between two points?)

### History

#### #1 - 29 Nov 2017 21:39 - John Abbott

- Status changed from New to In Progress
- % Done changed from 0 to 50

I have checked in a first impl. It seems to work on a couple of simple tests.

The main problem is that it produces ugly coeffs -- this needs to be improved!

CoCoALib-0.99600

#### #2 - 12 Mar 2018 16:45 - John Abbott

- Status changed from In Progress to Resolved
- Assignee set to John Abbott
- % Done changed from 50 to 80

The implementation seems to be mostly complete (for coeffs in QQ).

The elements of the sequence are scaled so that the coeffs are integer.

### #3 - 12 Jun 2018 18:32 - John Abbott

- Status changed from Resolved to Feedback
- % Done changed from 80 to 90

Works OK in ad hoc testing -- fixed a couple of bugs.

# #4 - 03 Aug 2018 16:05 - John Abbott

- Status changed from Feedback to Closed
- % Done changed from 90 to 100
- Estimated time set to 4.44 h

The impl ought to be generalized (to any "ordered field"). This is probably not an easy task, so let's wait until it is needed.

Closing.

20 Apr 2024 1/1