CoCoALib - Bug #938

ReadExpr: misreads 2/3^4

06 Oct 2016 11:37 - John Abbott

Status:	Closed		Start date:	06 Oct 2016
Priority:	Urgent		Due date:	
Assignee:	John Abbott		% Done:	100%
Category:	Maths Bugs		Estimated time:	2.60 hours
Target version:	CoCoALib-0.99550 spring 2017		Spent time:	2.50 hours

Description
After my change to ReadExpr so that it can read rational numbers, the fn now misreads "2/3^4" and produces 16/81 instead of 2/81.
Rectify! And add a test!

Related issues:			
Related to CoCoA-5 - Feature #909: ReadExpr: decimal point		**Closed**	**14 Jul 2016**
Related to CoCoALib - Bug #936: ReadExpr: cannot handle exponent which is not...		**Closed**	**05 Oct 2016**

History

#1 - 06 Oct 2016 11:38 - John Abbott

It is a slightly subtle bug: at first sight it seems reasonable that <constant>^<integer> should yield the obvious power of the constant, but this is not how I read 2/3^4.

#2 - 07 Oct 2016 15:11 - John Abbott

- Related to Feature #909: ReadExpr: decimal point added

#3 - 07 Oct 2016 15:15 - John Abbott

- Status changed from New to In Progress

- Assignee set to John Abbott

- % Done changed from 0 to 10

I see no choice but to make 2/3^4 read as an expression div(2, power(3,4)), and this implies that all rationals expressed as explicit quotients have to be read as an expression div(...,...).

#4 - 08 Oct 2016 21:55 - John Abbott

- Status changed from In Progress to Feedback

- % Done changed from 10 to 90

I have fixed it now, and added a new test-RingElem5 for the function ReadExpr (for rational numbers).

Trickier than expected; also not so easy coming up with the various test cases.

#5 - 08 Oct 2016 22:10 - John Abbott

- Related to Bug #936: ReadExpr: cannot handle exponent which is not integer literal added

#6 - 09 Nov 2016 10:46 - John Abbott

- Target version changed from CoCoALib-0.99560 to CoCoALib-0.99550 spring 2017

#7 - 18 Nov 2016 22:23 - John Abbott

- Status changed from Feedback to Closed

- % Done changed from 90 to 100

- Estimated time set to 2.60 h