

## CoCoA-5 - Bug #159

### Multiplicity sometimes wrong

15 May 2012 19:54 - John Abbott

<b>Status:</b>	Closed	<b>Start date:</b>	15 May 2012
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Anna Maria Bigatti	<b>% Done:</b>	100%
<b>Category:</b>	Incomplete function	<b>Estimated time:</b>	3.50 hours
<b>Target version:</b>	CoCoA-5.0.3	<b>Spent time:</b>	3.50 hours
<b>Description</b>			
It seems to work OK for monomial ideals, but...			
<pre>Use P ::= QQ[x]; I := Ideal((x-1)^3); Multiplicity(P/I); --&gt; 2 ?!?</pre> <pre>I := Ideal(x^3); Multiplicity(P/I); --&gt; 3 OK!</pre>			
<b>Related issues:</b>			
Related to CoCoA-5 - Bug #166: Dim/Multiplicity with Lex ordering -- NYI		<b>Closed</b>	<b>23 May 2012</b>

### History

#### #1 - 15 May 2012 22:51 - Anna Maria Bigatti

- Status changed from New to Resolved
- Assignee set to Anna Maria Bigatti
- Target version set to CoCoA-5.0.3

#### #2 - 31 May 2012 18:58 - Anna Maria Bigatti

Add also Dim&Mult for non-standard degree (or no degree, such as with Lex)  
They are defined independently of the grading, and they can be computed homogenizing /wrt/ the standard grading.

#### #3 - 08 Jun 2012 17:23 - Anna Maria Bigatti

- Category set to Incomplete function
- Status changed from Resolved to Closed
- % Done changed from 0 to 100

#### #4 - 08 Jun 2012 17:29 - Anna Maria Bigatti

- Estimated time set to 3.50 h