# CoCoALib - Bug #1411

## IsPrimary sometimes wrong

03 Feb 2020 13:45 - John Abbott

Status: Closed Start date: 03 Feb 2020

Priority: Normal Due date:

Assignee: John Abbott % Done: 100%
Category: Maths Bugs Estimated time: 1.25 hour
Target version: CoCoALib-0.99700 Spent time: 1.20 hour

Description

The IsPrimary sometimes gives a wrong result.

Here is an instance:

```
p:=2;
K::=ZZ/(p);
Use R::=K[x,y];
J:=ideal(x^2, y^2 +y +1);
IsPrimary(J); --> incorrectly gives false
```

Reported by email; simplified by Robbiano.

#### Related issues:

Related to CoCoALib - Design #1409: myTestlsPrimary & Co. : fix design

Closed

O3 Feb 2020

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Closed

O3 Feb 2020

#### History

### #1 - 03 Feb 2020 14:43 - John Abbott

- Status changed from New to Resolved
- Assignee set to John Abbott
- % Done changed from 0 to 70
- Estimated time set to 1.50 h

I think it is OK now.

The problem was in SparsePolyOps-ideal-ZeroDim.C around line 295. The result was computed but not set by myAssignaPrimaryFlag. Added the call to myAssignPrimaryFlag. Seems to work now.

## #2 - 03 Feb 2020 15:40 - Anna Maria Bigatti

- Related to Design #1409: myTestIsPrimary & Co. : fix design added

### #3 - 03 Feb 2020 15:40 - John Abbott

- Related to Design #1409: myTestIsPrimary & Co. : fix design added

#### #4 - 03 Feb 2020 15:42 - John Abbott

- Status changed from Resolved to Closed
- % Done changed from 70 to 100
- Estimated time changed from 1.50 h to 1.25 h

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This was a duplicate of #1409; server problems in Genoa meant I didn't know/notice that Anna had already resolved this.

Closing this issue; letting  $\frac{\text{#}1409}{\text{deal}}$  deal with completion.

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