

## CoCoALib - Support #942

### Which names to use? Intersection/saturation vs intersect/saturate

10 Oct 2016 21:18 - John Abbott

<b>Status:</b>	In Progress	<b>Start date:</b>	10 Oct 2016
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	20%
<b>Category:</b>	Renaming	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	CoCoALib-0.99900	<b>Spent time:</b>	0.75 hour
<b>Description</b>			
I notice that we have the following 2 names for functions: <b>intersection</b> and <b>saturate</b> .			
In CoCoA-3 and CoCoA-4 we tended to use nouns (or adjectives) for most function names; in CoCoA-5 there is a move towards verbs ( <i>e.g.</i> <b>factor</b> ).			
Can we be more consistent?			
<b>Related issues:</b>			
Related to CoCoA-5 - Design #1456: IntersectList or IntersectionList		<b>New</b>	<b>06 May 2020</b>
Related to CoCoALib - Feature #1619: Make saturate available in CoCoALib		<b>Closed</b>	<b>15 Oct 2021</b>

#### History

##### #1 - 10 Oct 2016 21:20 - John Abbott

I have put this issue under CoCoALib, but it is just as relevant to CoCoA-5.

In general my personal preference is (usually) to use verbs, but I expect there are many exceptions (*e.g.* **det**).

##### #2 - 10 Nov 2016 09:21 - Anna Maria Bigatti

- Related to Slug #967: Improve saturate added

##### #3 - 18 Mar 2024 14:10 - Anna Maria Bigatti

- Subject changed from *Which names to use? Intersection vs saturate* to *Which names to use? Intersection/saturation vs intersect/saturate*

In CoCoA-4 we had intersection and saturation. Now we have a mixture...

Singular and Macaulay use **intersect** and **sat/saturate**.

##### #4 - 18 Mar 2024 18:35 - John Abbott

- Status changed from *New* to *In Progress*

- % Done changed from 0 to 10

Also **IntersectionList**

##### #5 - 18 Mar 2024 18:44 - Anna Maria Bigatti

- % Done changed from 10 to 20

[Conversation with Robbiano]

XXXX-ation gives a commutative feeling, XXXX-ate gives an action (non-commutative) feeling.

Let's compare with other similar situations in CoCoA.

**#6 - 18 Mar 2024 21:45 - John Abbott**

**sat** is perhaps too short, and may be ambiguous with the **SAT** (satisfiability) family of functions.

I'm undecided about intersection vs intersect; I feel that intersection sounds nicer, but intersect is shorter (quicker to read & write). It would be odd to have intersect and IntersectionList.

**#7 - 20 Mar 2024 15:58 - Anna Maria Bigatti**

- Related to Design #1456: *IntersectList* or *IntersectionList* added

**#8 - 21 Mar 2024 17:57 - Anna Maria Bigatti**

- Related to Feature #1619: *Make saturate available in CoCoALib* added

**#9 - 21 Mar 2024 17:57 - Anna Maria Bigatti**

- Related to deleted (Slug #967: *Improve saturate*)

**#10 - 22 Mar 2024 10:20 - Anna Maria Bigatti**

- Target version changed from *CoCoALib-1.0* to *CoCoALib-0.99900*

I prefer to go through similar situations before changing the current names.

Make a list.

Postponing.