Ruby master - Bug #13104
mathn.rb affects Rational literals
01/05/2017 07:45 AM - nobu (Nobuyoshi Nakada)

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
</tr>
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<tbody>
<tr>
<td>Priority:</td>
<td>Normal</td>
</tr>
<tr>
<td>Assignee:</td>
<td>matz (Yukihiro Matsumoto)</td>
</tr>
<tr>
<td>Target version:</td>
<td>ruby -v: r57270</td>
</tr>
<tr>
<td>Backport:</td>
<td>2.2: REQUIRED, 2.3: REQUIRED, 2.4: REQUIRED</td>
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</table>

**Description**

Without mathn:

```
$ ruby -e 'p 1.0r'
(1/1)
```

With mathn:

```
$ ruby -r_mathn -e 'p 1.0r'
1
```

Is this intentional?

https://github.com/ruby/ruby/compare/trunk...nobu:bug/rational-literal-mathn

**History**

#1 - 01/20/2017 04:26 AM - shyouhei (Shyouhei Urabe)
We looked at this issue at yesterday's developer meeting.

The intension was not made clear, but we confirmed that mathn's global side-effects are the nature of that library. Maybe requiring it implies your willing to accept such surprising behaviour.

#2 - 01/20/2017 05:24 AM - nobu (Nobuyoshi Nakada)
- Subject changed from math.rb affects Rational literals to mathn.rb affects Rational literals

Just "don't use math"?

#3 - 02/23/2017 08:19 PM - stomar (Marcus Stollsteimer)
Seems to be triggered by ext/mathn/rational/rational.c and ext/mathn/complex/complex.c, which activate "canonicalization" in rational.c and complex.c.

```
$ ruby -r mathn/rational -e 'p Rational(2/1)'
2
$ ruby -r mathn/complex -e 'p Complex("3+0i")'
3
```

I suppose the reasoning behind the behavior was that in mathematics generally the simplest representation of a number is used, and n/1 = n.

But what are the plans for mathn anyway? -- It seems to be deprecated since 2.2 (#10169).

#4 - 12/01/2017 04:30 PM - naruse (Yui NARUSE)
- Target version deleted (2.5)

mathn is out of scope from release engineering.

#5 - 07/25/2019 11:46 PM - jeremyevans0 (Jeremy Evans)
- Status changed from Assigned to Closed

mathn was removed in Ruby 2.5.