

Ruby master - Bug #9689

(BigDecimal + Float) no longer commutative due to #7176

04/01/2014 05:12 AM - saurik (Jay Freeman)

Status:	Closed	
Priority:	Normal	
Assignee:	mrkn (Kenta Murata)	
Target version:		
ruby -v:	ruby 2.0.0p299 (2013-08-29) [x86_64-linux-gnu]	Backport: 2.0.0: UNKNOWN, 2.1: UNKNOWN

Description

So, there was a bug filed a while back ([#7176](#)) about Rational + BigDecimal failing, despite BigDecimal + Rational working.

<https://bugs.ruby-lang.org/issues/7176>

When this bug was fixed (in r37406), the new BigDecimal#+ also (I believe unnecessarily) converts Float to BigDecimal, making BigDecimal + Float return a BigDecimal despite Float + BigDecimal returning a Float. Given that work was put in to make BigDecimal + Rational commutative it seems like the same behavior should be in place for BigDecimal + Float: preferably, either both should be commutative, or neither should be commutative. (Please understand that I filed this as a "Bug", as this seems like a regression from the earlier behavior, but I would not at all quibble if someone decided that this should actually be classified as a "Feature" instead.)

(BTW, while doing due diligence on this issue, I determined that there was a previous bug [#2129](#) that was filed against Rational + BigDecimal years ago that has almost the same description as 7176. At the time, Rational + BigDecimal returned a Rational; I think this is the more correct behavior, because any BigDecimal can be represented as a Rational, but not all Rationals can be represented as a BigDecimal. As a concrete example, 1/9 has no BigDecimal representation. Given that this behavior has already changed before, it seems like a fix for the commutativity of Float+BigDecimal should probably also deal with this other problem.)

<https://bugs.ruby-lang.org/issues/2129>

History

#1 - 07/18/2014 05:54 AM - mrkn (Kenta Murata)

- Assignee set to mrkn (Kenta Murata)

#2 - 07/26/2014 04:28 PM - zzak (Zachary Scott)

- Category set to ext

- Status changed from Open to Assigned

- Target version set to 2.2.0

#3 - 12/10/2016 07:19 AM - mrkn (Kenta Murata)

- Status changed from Assigned to Closed

This is fixed in the latest master branch of [ruby/bigdecimal](#).