Ruby master - Bug #12980

Time - Time to return a Rational

11/25/2016 08:18 AM - matsuda (Akira Matsuda)

Status:	Closed		
Priority:	Normal		
Assignee:	akr (Akira Tanaka)		
Target version:			
ruby -v:	ruby 2.4.0dev (2016-11-25 trunk 56897) [x86_64-darwin15]	**Backport:**	2.1: UNKNOWN, 2.2: UNKNOWN, 2.3: UNKNOWN

Description

Currently subtracting a Time from a Time returns a Float, which I guess causes #12952

Is there any reason this doesn't return a Rational?

History

#1 - 11/25/2016 08:26 AM - matsuda (Akira Matsuda)

Well, my assumption seems wrong.

0.5r.round also becomes 0, so this isn't really related to #12952
Still I'm wondering why Time - Time isn't Rational though.

#2 - 11/25/2016 08:49 AM - duerst (Martin Dürst)

- Subject changed from Time - Time to return a Retional to Time - Time to return a Rational

#3 - 11/25/2016 09:25 AM - akr (Akira Tanaka)

It is because ruby-dev:38446 by mame-san.

http://blade.nagaokaut.ac.jp/cgi-bin/scat.rb/ruby/ruby-dev/38446

#4 - 11/25/2016 09:25 AM - akr (Akira Tanaka)

- Status changed from Open to Feedback

#5 - 11/25/2016 01:31 PM - mame (Yusuke Endoh)

I think of one philosophical reason and one practical reason.

A philosophical reason: many Time objects are inherently inexact. Since a Rational is considered exact, returning a Rational might convey the wrong message that the Time objects are exact.

A practical reason: Time is often used for a simple benchmark tool. Consider "t = Time.now; ...; p Time.now - t" prints, such as (631882841/200000000) or (1590642983/500000000). It is difficult for human to read and compare the result.

#6 - 12/06/2016 08:48 AM - matsuda (Akira Matsuda)

- Status changed from Feedback to Closed

All right. Sounds rational. Thank you for the explanation, Mame-san and akr-san!