

Ruby master - Bug #7682

Inconsistent results when using variables versus raw floats in exponential calculations

01/11/2013 05:48 AM - ccashwell (Chris Cashwell)

Status: Rejected	
Priority: Normal	
Assignee:	
Target version: 1.9.3	
ruby -v: ruby 1.9.3p194 (2012-04-20 revision 35410) [x86_64-darwin11.4.0]	Backport:

Description

When performing exponential calculations using a negative number as the base, inconsistent results are returned when using the raw value as opposed to a variable containing the value.

In IRB:

```
1.9.3p194 :001 > -4.5 ** 0.5
=> -2.1213203435596424
1.9.3p194 :002 > foo = -4.5
=> -4.5
1.9.3p194 :003 > foo ** 0.5
=> (1.2989340843532398e-16+2.1213203435596424i)
```

The expected behavior is that these two calculations should be equivalent. The compiler treats the - sign differently when using an inline float versus a variable float.

History

#1 - 01/11/2013 06:20 AM - charliesome (Charlie Somerville)

- Status changed from Open to Rejected

=begin

The `{{{*}}` operator has a higher precedence than unary minus, so your example is actually `{{{-4.5 * 0.5}}`.

=end