Ruby master - Bug #16030

**test_memsize fails on x32 ABI: Unsupported RVALUE_SIZE=24**

07/31/2019 07:29 AM - GreenReaper (Laurence Parry)

### Status: Closed
### Priority: Normal
### Assignee: GreenReaper
### Target version:

<table>
<thead>
<tr>
<th>ruby -v:</th>
<th>Backport:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ruby 2.5.5p157 (2019-03-15 revision 67260) [x86_64-linux-gnux32]</td>
<td>2.5: UNKNOWN, 2.6: UNKNOWN</td>
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### Description
Tests fail on Debian's build system for the x32 ABI port for ruby-2.5 over a single issue:

1) Failure:
TestTime#test_memsize [//<<PKGBUILDDIR>>/test/ruby/test_time.rb:1160]:
Unsupported RVALUE_SIZE=24, update test_memsize

The full log is at [https://buildd.debian.org/status/fetch.php?pkg=ruby2.5&arch=x32&ver=2.5.5-4&stamp=1564494509&raw=0](https://buildd.debian.org/status/fetch.php?pkg=ruby2.5&arch=x32&ver=2.5.5-4&stamp=1564494509&raw=0)

I believe the necessary change is to add the line:

```ruby
when 24 then expect = 54
```

to def test_memsize at the end of ruby/test/ruby/test_time.rb, based on the following test I ran:

```ruby
require 'test/unit'
require 'delegate'
require 'timeout'
require 'delegate'
require 'objspace'

size = GC::INTERNAL_CONSTANTS[:RVALUE_SIZE]
puts size
puts ObjectSpace.memsize_of(t)
```

which output 24 and 54 respectively.

On x32, `time_t` is 64-bit, but pointers are 32-bit, so it makes sense that it's just 4 more than the 20 case for regular 32-bit.

### Previous email to Debain maintainers:
[https://www.mail-archive.com/pkg-ruby-extras-maintainers@alioth-lists.debian.net/msg04431.html](https://www.mail-archive.com/pkg-ruby-extras-maintainers@alioth-lists.debian.net/msg04431.html)

### Debian bug:
[https://bugs.debian.org/cgi-bin/bugreport.cgi?bug=920017](https://bugs.debian.org/cgi-bin/bugreport.cgi?bug=920017)

## Associated revisions

**Revision ee821e90 - 10/17/2019 07:21 PM - jeremyevans (Jeremy Evans)**

Update test to handle x32 ABI compiled Ruby on Linux

Suggestion from Laurence Parry.

Fixes [Bug #16030]

**History**

#1 - 10/17/2019 07:22 PM - jeremyevans (Jeremy Evans)

- Status changed from Open to Closed

Applied in changeset git://gitlab.com/ruby/ruby.git#commitid=82c357f1f715d612f33e819452b26c3f2ca86a60
Update test to handle x32 ABI compiled Ruby on Linux

Suggestion from Laurence Parry.

Fixes [Bug #16030]