

480 -- April 14, 2008

```
4195835.0/3145727.0
```

```
1.33382044913624
```

```
R = RealField(100)
a = R(4195835/3145727); a
```

```
1.3338204491362410024773287701
```

```
# pentium from 1990s:
# 4195835.0/3145727.0
print 1.333739068902037589, "(pentium from 1990s)"
print a, "(correct)"
```

```
1.333739068902037589 (pentium from 1990s)
1.3338204491362410024773287701 (correct)
```

```
%cython
```

```
cdef int bad():
    cdef int* pointer = <int*>0 # <int*> casts 0 to a pointer
    cdef int n
    n = 10
    # ...
    n = pointer[0] # [0] is pointer dereferencing in cython
    return n
```

```
def foo():
    return bad()
```

[Users wa...0 code sage26 spyx.c](#)

[Users wa...sage26 spyx.pyx.html](#)

```
foo()
```

```
-----
Unhandled SIGBUS: A bus error occurred in SAGE.
This probably occurred because a *compiled* component
of SAGE has a bug in it (typically accessing invalid memory)
or is not properly wrapped with _sig_on, _sig_off.
You might want to run SAGE under gdb with 'sage -gdb' to debug this.
SAGE will now terminate (sorry).
-----
```

```
%gdb_cython

cdef int bad():
    cdef int* pointer = <int*>0 # <int*> casts 0 to a pointer
    cdef int n
    n = 10
    # ...
    n = pointer[0] # [0] is pointer dereferencing in cython
    return n

def foo():
    return bad()
```

The Sage compute process quit (possibly Sage crashed?).
Please retry your calculation.

```
%cython

cdef int bad():
    print 1
    cdef int* pointer = <int*>0 # <int*> casts 0 to a pointer
    print 2
    cdef int n
    print 3
    n = 10
    print 4
    # ...
    n = pointer[0] # [0] is pointer dereferencing in cython
    print 5
    return n

def foo():
    return bad()
```

[Users wa...0 code sage31 spyx.c](#)

[Users wa...sage31 spyx.pyx.html](#)

```
foo()
```

```
1
2
3
4
```

```
-----
Unhandled SIGBUS: A bus error occurred in SAGE.
This probably occurred because a *compiled* component
of SAGE has a bug in it (typically accessing invalid memory)
or is not properly wrapped with _sig_on, _sig_off.
You might want to run SAGE under gdb with 'sage -gdb' to debug this.
SAGE will now terminate (sorry).
-----
```

