# Mini Quiz 17 (not for credit)

Name: _____

Kerberos: _____

Consider the following code:

```
func_foo:
line1:    enter $8, $0
line2:    movq $1, %rdi
line3:    call foo
line4:    addq %rdi, %rax
line5:    leave
line6:    ret

Caller save regs: RAX, RCX, RDX, R8-R11
Callee save regs: RBX, RBP, RDI, RSI, RSP, R12-R15
```

Q: What could go wrong with the above code? Name two ways of fixing it.

Rdi could be destroyed by foo(). To fix:

- Use a different register (e.g., rdx)
- Store rdi (or the value directly) on the stack

Q: Linearize the following expression: `(a-foo())-bar(baz()*2)`

```
T1 = a
T2 = foo()
T3 = T1 - T2
T4 = baz()
T5 = 2
T6 = T4 * T5
T7 = bar(T6)
T8 = T3 - T7
```