Problem 2

(a) Results for different values of x:

x = %rax
i = %rdi

rax	0xc	12
rbx	0x18	24
rcx	0xc	12
rdx	0x0	0
rsi	0x0	0
rdi	0x4	4

rax	0x9	9
rbx	0x2d0	720
rcx	0x9	9
rdx	0x0	0
rsi	0x0	0
rdi	0x6	6

rax	0xb	11
rbx	0x2611500	39916800
rcx	0xb	11
rdx	0x0	0
rsi	0x0	0
rdi	0xb	11

rax	0x15	21
rbx	0x13b0	5040
rcx	0x15	21
rdx	0x0	0
rsi	0x0	0
rdi	0x7	7

rax	0x16	22
rbx	0x2611500	39916800
rcx	0x16	22
rdx	0x0	0
rsi	0x0	0
rdi	0xb	11

(b) Overflow Values:

Values of after which overflow begins:

- 64 bit: x = 23
- 32 bit: x = 13
- 16 bit: x = 11
- 8 bit: x = 7