附 8.5:

```c
#include <stdio.h>
#include <stdlib.h>
#include <time.h>
#include <math.h>
#define TRY 1145141919
#define EPOCH 100000000
int __fastcall gcd(int a, int b){
    int t;
    while(b){
        t=b;
        b=(a%b);
        a=t;
    }
    return a;
}
int non_zero_rand(void){
    int r=0;
    while(!r){
        r = rand();
    }
    return r;
}
int main(){
    int a, b;
    unsigned long long prc = 0, even = 0;
    srand(time(NULL));
    for (unsigned long long i = 0; i < TRY; i++)
    {
        a = non_zero_rand();
        b = non_zero_rand();
        even += ((a%2==0)&(b%2==0));
        prc += (gcd(a, b)==1);
        if(i%EPOCH==0)printf("epoch %llu\n", i);
    }
    double ev = even;
    printf("prob of getting two even is %lf\n", ev / TRY);
    double p = prc;
    double r = p / TRY;
    r = sqrt(6/r);
    printf("pi is %lf\n", r);
}
```

```
C:\Users\longh\Desktop
# randompi.exe
epoch 0
epoch 100000000
epoch 200000000
epoch 300000000
epoch 400000000
epoch 500000000
epoch 600000000
epoch 700000000
epoch 800000000
epoch 900000000
epoch 1000000000
epoch 1100000000
prob of getting two even is 0.250008
pi is 3.141584
```