

Problem 1:

a. Transaction ID:

[d365bac640b5fbfe55505ea1d77b2b2cdfb505c1cae1af7839532f66a9596bd3](#)

b. transaction fee: 0.0001 BTC, \$0.02 USD

c. 9,582.13304127 BTC

d. about 30 minutes. A confirmation happens for every block and blocks take on average 10 minutes so $3 \times 10 = 30$ minutes.

Problem 2:

a. bitcoin addresses of other students:

1. [15j1jdJsMa4vR71gcZ6FCfYeAWJdPwpm7W](#)
2. [1MzdKiBn5qr8CS1cbts6TQuuxsAo52yFKe](#)
3. [163vXnDXSc2hEKMmrWHkERzBJWuuKJve5Nc](#)

b. bitcoin came from transaction

[050c90d69f039f61f619e8821a7b4491fdbd8d780b50bc97695a227e04d2b956](#)

and address [19WmbY4nDcjAEv6wb5rcd5E6MutVMXBZzy](#)

for the amount of .1949 BTC on 8-26 at **20:48:48**

c. from the map on the transaction data it looks like it came from New Jersey

Problem 3:

- An evil wallet would store your personal private key to a place accessible by the owner of the software. They could then use your key for transactions and hide the data for only those transactions, fooling you into thinking you had more money than actually possessed.
- I'm confident because it was recommended by my professor... However, I can't personally verify it is safe. If I were to store all my money in here I'd want to have proof that no one other than me can see my private key.

Problem 4:

```
ps1.go
1 package main
2
3 import (
4     "math/big"
5     "math"
6     "fmt"
7 )
8
9 func main() {
10     i := math/big.NewFloat()
11     i.SetString("FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFC2F", 16)
12     fmt.Println(i)
13
14     var base float64 = 2
15     num := math.Pow(base, 256) - math.Pow(base, 32) - math.Pow(base, 9) - math.Pow(base, 8) -
16           math.Pow(base, 7) - math.Pow(base, 6) - math.Pow(base, 4) - math.Pow(base, 2) - 1
17     fmt.Println(num)
18     i == num
19
20 }
```