

Problem 1 running code:

```
Line 1 = Begin: (34, 4), End: (36, 5), length = 2.23606797749979  
Line 2 = Begin: (30, 7), End: (26, 2), gradient = 0.8960553845713439  
Line 3 = Begin: (15, 2), End: (17, 3)
```

Problem 2 running code:

```
Area of rectangle 1: 12  
Area of rectangle 2: 30
```

Problem 3 running code:

```
Christie Diane, 237J Harvey Hall, Menomonie, WI, 54751  
Balance: $0.0  
Credit Limit: $1000.0  
  
Attempting to charge: $200.0  
Balance: $200.0  
Attempting to charge: $10.1  
Balance: $210.1  
Attempting to pay: $25.0  
Balance: $160.1  
Attempting to charge: $990.0  
Credit Limit Exceeded!  
Balance: $160.1
```