Loan

Problem Description:

There are many different types of consumer loans. One form of loan is the **discount installment loan**, which works as follows. Suppose a loan has a face value of $1000, the interest rate is 15%, and the duration is 18 months. The interest is computed by multiplying the face value of $1000 by 0.15 to yield $150. That figure is then multiplied by the loan period of 1.5 years to yield $225 as the total interest owed. That amount is immediately deducted from the face value, leaving the consumer with only $775. Repayment is made in equal monthly installments based on the face value. So the monthly loan payment will be $1000 divided by 18, which is $55.56. This method of calculation may not be too bad if the consumer needs $775 dollars, but the calculation is a bit more complicated if the consumer needs $1000. Write a program that will take three inputs: the amount the consumer needs to receive, the interest rate, and the duration of the loan in months. The program should then calculate the face valued required in order for the consumer to receive the amount needed. It should also calculate the monthly payment. The answers must be formatted as dollars and cents.

Example Output:

```
Enter the amount the consumer needs: 775
Enter the interest rate: 15
Enter the duration of the loan (months): 18

The face value needed is $1000.00
The monthly payment will be $55.56
```

Required Test Cases:

```
1000, 12, 30
```

Skills:

●Var ●Con I/O ●Format ○Logic ○Loops ○Functions ○Call by Ref ○File I/O ○Arrays ○Strings ○GM