

12. The cost of a Blazer is \$18,000, which can be financed by paying \$600 down and \$385 per month for 60 months.
- Determine the amount financed.
 - Determine the total installment price.
 - Determine the finance charge.
 - What is the APR for this loan?

13. In Exercise 11, instead of making the twenty-fourth payment, the borrower decides to pay the remaining balance and terminate the loan for the furniture.
- Use the actuarial method to determine how much interest will be saved by repaying the loan early.
 - By the actuarial method, what is the total amount due on the day of the loan's termination?
 - Use the rule of 78 to determine how much interest will be saved by repaying the loan early.
 - By the rule of 78, what is the total amount due on the day of the loan's termination?

14. In Exercise 12, instead of making the twenty-fourth payment, the borrower decides to pay the remaining balance and terminate the loan for the Blazer.
- Use the actuarial method to determine how much interest will be saved by repaying the loan early.
 - By the actuarial method, what is the total amount due on the day of the loan's termination?
 - Use the rule of 78 to determine how much interest will be saved by repaying the loan early.
 - By the rule of 78, what is the total amount due on the day of the loan's termination?

15. A particular VISA card calculates interest using the unpaid balance method. The monthly interest rate is 1.3% on the unpaid balance on the first day of the billing period less payments and credits. Here are some of the details in the April 1–May 31 itemized billing:

May 1 Unpaid Balance: \$950

Payment Received May 8: \$100

Purchases Charged to the VISA Account: clothing, \$85 and car repair, \$67

Last Day of the Billing Period: May 31

Payment Due Date: June 9

- Find the interest due on the payment due date.
- Find the total balance owed on the last day of the billing period.
- This credit card requires a \$10 minimum monthly payment if the total balance owed on the last day of the billing period is less than \$360. Otherwise, the minimum monthly payment is $\frac{1}{36}$ of the balance owed on the last day of the billing period, rounded to the nearest whole dollar. What is the minimum monthly payment due by June 9?

16. A particular credit card calculates interest using the unpaid balance method. The monthly interest rate is 1.75% on the unpaid balance on the first day of the billing period less payments and credits. Here are some of the details in the September 1–September 30 itemized billing:

September 1 Unpaid Balance: \$425

Payment Received September 6: \$75

Purchases Charged to the Account: groceries, \$45 and clothing, \$77

Last Day of the Billing Period: September 30

Payment Due Date: October 9

- Find the interest due on the payment due date.
- Find the total balance owed on the last day of the billing period.
- Terms for this credit card are shown in the following table. What is the minimum monthly payment due by October 9?

New Balance	Minimum Payment
\$0.01 to \$10.00	No payment due
10.01 to 200.00	\$10.00
200.01 to 250.00	15.00
250.01 to 300.00	20.00
300.01 to 350.00	25.00
350.01 to 400.00	30.00
400.01 to 450.00	35.00
450.01 to 500.00	40.00
Over \$500.00	$\frac{1}{10}$ of new balance

17. A credit card has a monthly rate of 1.5% and uses the average daily balance method for calculating interest. Here are some of the details in the April 1–April 30 itemized billing:

April 1 Unpaid Balance: \$445.59

Payment Received April 5: \$110

Purchases Charged to the Account: \$278.06

Average Daily Balance: \$330.90

Last Day of the Billing Period: April 30

Payment Due Date: May 9

- Find the interest due on the payment due date.
 - Find the total balance owed on the last day of the billing period.
 - Terms for this credit card are given in Exercise 16. What is the minimum monthly payment due by May 9?
18. A credit card has a monthly rate of 1.8% and uses the average daily balance method for calculating interest. Here are some of the details in the December 1–December 31 itemized billing:
- December 1 Unpaid Balance: \$220
 Payment Received December 7: \$60
 Purchases Charged to the Account: \$90
 Average Daily Balance: \$205.60
 Last Day of the Billing Period: December 31
 Payment Due Date: January 9
- Find the interest due on the payment due date.
 - Find the total balance owed on the last day of the billing period.
 - Terms for this credit card are given in Exercise 16. What is the minimum monthly payment due on January 9?
19. A credit card has a monthly rate of 1.5%. In the September 1–September 30 itemized billing, the September 1 unpaid balance is \$3000. A payment of \$2500 was received on September 6. There are no purchases or cash advances in this billing period. The payment due date is October 9. Find the interest due on this date using
- the unpaid balance method.
 - the previous balance method.
 - the average daily balance method.

(15) (a) Unpaid = Beginning - Payments - Credits
 $P = 950 - 100 = 850$

$$I = 850(.013) = 11.05$$

(b) 5/1 = 950

5/8 - 100

Purch 152

1002 balance

(c) $1002 \times \frac{1}{36} = \28 minimum due

(16) Unpaid Bal = $425 - 75 = 350$ ^P

(a) $I = 350(.0175) = \$6.13$

(b) 9/1 425

9/6 - 75

Purch 122

472 ending balance

(c) \$40

$$\textcircled{17} \text{ Avg Daily} = 330.90$$

$$\times .015$$

$$\textcircled{a} \text{ Interest } \boxed{\$4.96}$$

$$\textcircled{b} \begin{array}{r} 4/1 \quad 445.59 \\ 4/5 \quad -110.00 \\ \hline \text{Add: } 279.06 \\ \text{End Bal } \underline{613.65} \end{array}$$

$$\textcircled{c} \text{ Minimum due} = \boxed{\$61.37}$$

$$\textcircled{19} \begin{array}{r} 12/1 \quad 220 \\ 12/7 \quad -60 \\ \hline \text{Add} \quad 90 \\ 12/31 \quad \underline{\$250} \end{array}$$

$$\textcircled{a} 205.60 \times .018 = \boxed{\$3.70 \text{ int}}$$

$$\textcircled{b} \$250 \text{ owed } 12/31$$

$$\textcircled{c} \$15$$

(19) Dates	balance	# Days	Avg
9/1-9/5	3000	5	15000
9/6-9/30	500	25	12500
		30	7500

(a) balance 9/30 = 500 unpaid balance

$$500 \times .015 = \$7.50 \text{ interest}$$

(b) Previous balance on 9/1 = \$3000

$$3000 \times .015 = \$45 \text{ interest}$$

(c) total Avg = $27,500 \div 30 = \$916.67$ per day

$$916.67 \times .015 = \$13.75 \text{ interest}$$

Average Daily balance