

Credit Cards and Store Promotions



buy now
PAY
later...



Click on the terminology to see the definition:

advance *cash*

Payment

down

credit

finance
charge

Next 

credit

An agreement in which a borrower receives something of value, and agrees to pay for it later.

cash advance

A withdrawal of cash from an ATM or bank teller charged to a credit card.

Interest is usually calculated from the day of the withdrawal.

Payment **down**

A partial payment sometimes required at the time of a purchase.

finance charge

The total amount of
interest paid
to borrow a
sum of money.

Credit Card Lingo....



credit limit The maximum amount of credit that a financial institution or other lender will extend.

minimum payment The amount of money the user must pay in order to retain usability of the credit card

annual fee A yearly fee, usually ranging from \$15 to \$300, that's charged by the credit card company for the convenience of the credit card.

**Not all credit cards have an annual fee.



Interest is NOT charged
on your credit card if you
pay the balance every
month!!

PURCHASE!!



Interest is calculated
ONLY if
the balance of the credit
card has not been paid
by the due date.

If you don't pay the full balance, interest is calculated from the date of each purchase.

CASH ADVANCE!!

Interest is calculated
starting the day of the
withdrawal



There is no grace period!!

Calculate the minimum payment, and the interest on the following credit card. (5.00% or \$10.00, whichever is greater), *← min payment*
of purchases

Unpaid balance: \$642.00 $P = 642.00$
 Interest rate per annum: 19.95% per annum $r = 0.1995$
 Time: 25 days $t = \frac{25}{365}$

① Minimum Payment: $642 \times 0.05 = \underline{\$32.10}$ or \$10.00

$$I = P \times r \times t$$

② Interest: $= \underline{\$642.00} \times \underline{0.1995} \times \underline{25/365}$
 $= \underline{\$642.00} \times 0.1995 \times 0.06849315$
 $= \$8.77$

Calculate the minimum payment, and the interest on the following credit card. (5.00% or \$10.00, whichever is greater). *← min payment*

Unpaid balance: \$98.00 $P = 98$
 Interest rate per: 18.75% per annum $r = 0.1875$
 Time: 20 days $t = \frac{20}{365}$



Minimum Payment: $98.00 \times 0.05 = \$4.90$ at $\$10.00$

Interest: $= \underline{\$98.00} \times \underline{0.1875} \times \underline{20/365}$
 $= \underline{\$98.00} \times \underline{0.1875} \times \underline{0.05479452}$
 $= \$1.01$

Calculate the minimum payment and the interest on the following credit card. (5.00% or \$10.00, whichever is greater). *← min payment*

Unpaid balance: \$823.50 $P = 823.50$
 Interest rate per annum: 21.50% per annum $r = 0.2150$
 Time: 12 days $t = \frac{12}{365}$

Minimum Payment: $\$823.50 \times 0.05 = \text{\$41.18}$ or $\$10.00$

Interest: $= \underline{\$823.50} \times \underline{0.2150} \times \underline{12/365}$
 $= \underline{\$823.50} \times \underline{0.2150} \times \underline{0.032876712}$
 $= \$5.82$



$P = 500$

$r = 0.18$

$t = \frac{47}{365}$

On January 12, John charges a **cash advance** of \$500.00 to his credit card. This withdrawal appears on his monthly statement issued January 27. John does not pay off this amount by the due date shown on his statement. The next monthly statement is issued on February 27. John's bank charges 18.00% annual interest for cash advances starting on the day of the withdrawal.

Calculate the interest that John is charged for the January 12 cash advance.

January						
Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	<u>12</u>	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

February						
Su	Mo	Tu	We	Th	Fr	Sa
		<u>1</u>	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	<u>21</u>	22	23	24	25	26
<u>27</u>	28					

$I = Prt$

$I = (500.00)(0.18)(47/365)$

$I = (500.00)(0.18)(0.128767)$

$I = \$11.59$

20 days

27 days



Check out the sheet. :)

Credit Cards - Sheet #1

1. Calculate the interest, the balance due and minimum payments on the following credit cards.
(5.00% or \$10.00, whichever is greater).

a) Unpaid balance:	\$425.00	Interest:	$425 \times .25 \times \frac{25}{365}$ $= 425 \times .25 \times 0.06849$ <u>= \$7.28</u>
Interest rate per annum:	25.00% per annum	Minimum Payment:	$425 \times .05 =$ <u>\$21.25</u>
Time:	25 days		$1250 \times .22 \times \frac{18}{365}$
b) Unpaid balance:	\$1250.00	Interest:	$1250 \times .22 \times \frac{18}{365}$ <u>= \$13.56</u>
Interest rate per annum:	22.00% per annum	Minimum Payment:	$1250 \times 0.05 =$ <u>\$62.50</u>
Time:	18 days		$255 \times .1825 \times \frac{39}{365}$
c) Unpaid balance:	\$255.00	Interest:	$255 \times .1825 \times \frac{39}{365}$ <u>= \$3.83</u>
Interest rate per annum:	18.25% per annum	Minimum Payment:	$255 \times 0.05 =$ <u>\$12.75</u>
Time:	30 days		$(780)(.1975)(\frac{29}{365})$
d) Cash Advance:	\$780.00 ^{I=Prt}	Interest:	$(780)(.1975)(\frac{29}{365})$ <u>= \$8.44</u>
Interest rate per annum:	19.75% per annum	Minimum Payment:	$780 \times 0.05 =$ <u>\$39.00</u>
Time:	20 days		$425 \times .25 \times \frac{25}{365}$
e) Unpaid balance:	\$425.00	Interest:	$425 \times .25 \times \frac{25}{365}$ <u>= \$7.28</u>
Interest rate per annum:	25.00% per annum	Minimum Payment:	$425 \times 0.05 =$ <u>\$21.25</u>
Time:	25 days		$1250 \times .22 \times \frac{18}{365}$

Time:	25 days		$55 \times .1325 \times \frac{16}{365}$
f) Unpaid balance:	\$55.00	Interest:	$= 0.32$
Interest rate per annum:	13.25% per annum	Minimum Payment:	$55 \times 0.05 = 2.75$
Time:	16 days		
g) Unpaid balance:	\$155.00	Interest:	$155 \times .1825 \times \frac{28}{365}$ $= 2.17$
Interest rate per annum:	18.25% per annum	Minimum Payment:	$155 \times 0.05 = 7.75$
Time:	28 days		
h) Cash Advance:	\$80.00 <i>l=Prt</i>	Interest:	$80 \times .1925 \times \frac{19}{365}$ $= 0.80$
Interest rate per annum:	19.25% per annum	Minimum Payment:	$80 \times 0.05 = 4.00$
Time:	19 days		
i) Unpaid balance:	\$99.00	Interest:	$99 \times .1825 \times \frac{29}{365}$ $= 1.44$
Interest rate per annum:	18.25% per annum	Minimum Payment:	$99 \times 0.05 = 4.95$
Time:	29 days		
j) Cash Advance:	\$180.00	Interest:	$180 \times .1375 \times \frac{16}{365}$ $= 1.08$
Interest rate per annum:	13.75% per annum	Minimum Payment:	$180 \times 0.05 = 9.00$
Time:	16 days		

- Jennifer's credit card statement on Oct. 10th states that her previous balance is \$3500 from a bedroom set she purchased on Sept. 1st. The credit card charges 5% for a minimum payment.

Minimum Payment on Statement: _____

Balance Owing on Statement (40 days): _____

- On Oct. 28th she buys new bedding for \$150.00.
- How much does Jennifer owe on her credit card Nov. 5th?



Interest on previous balance (18 days): _____

Interest on new purchase (9 days): _____

Total Interest _____

Balance Owing: _____

- Sam bought a snow blower for \$2203.76 and charges it to his credit card.
- His next credit card statement is dated April 2nd and she pays only the minimum payment of %5.



Minimum Payment: _____

Balance Owing: _____

- On April 17th he buys an enclosure for his snow blower for 124.50, which he also charges .
- How much does Sam owe on his credit card on April 25th?

Interest on previous balance (24 days): _____

Interest on new purchase (9 days): _____

Total Interest _____

Balance Owing: _____

September							October						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3							1
4	5	6	7	8	9	10	2	3	4	5	6	7	8
11	12	13	14	15	16	17	9	10	11	12	13	14	15
18	19	20	21	22	23	24	16	17	18	19	20	21	22
25	26	27	28	29	30		23	24	25	26	27	28	29
							30	31					

Jane is charged 19.50% per annum on her credit card balances. She uses her credit card, which has no previous balance, to purchase a new wood stove that costs \$2100.36. Her next credit card statement is dated September 30 and she pays only the minimum payment (5% of her balance).

On October 5, Jane makes another purchase of \$450.00 with her credit card.

How much money will Jane owe on October 7? She makes no other purchases with her credit card. (Oct. 1 - 7)

Information:

Unpaid balance + interest + purchase + interest

\$ + \$ + \$ + \$

\$

September							October						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3	4	5	6	7	8	9	10
4	5	6	7	8	9	10	11	12	13	14	15	16	17
11	12	13	14	15	16	17	18	19	20	21	22	23	24
18	19	20	21	22	23	24	25	26	27	28	29	30	31
25	26	27	28	29	30								

Jane is charged 19.50% per annum on her credit card balances. She uses her credit card, which has no previous balance, to purchase a new wood stove that costs \$2100.36. Her next credit card statement is dated September 30 and she pays only the minimum payment (5% of her balance).

On October 5, Jane makes another purchase of \$450.00 with her credit card.

How much money will Jane owe on October 7? She makes no other purchases with her credit card. (Oct. 1 - 7)

Calculate minimum payment. (5%)

$$\begin{array}{r} \$ \\ \times 0.05 \\ \hline \$ \end{array}$$

Subtract minimum payment from balance.

$$\begin{array}{r} \$ \\ - \$ \\ \hline \$ \end{array}$$

Calculate interest on unpaid balance.

$$\begin{array}{l} I = \$ \\ I = \$ \\ I = \$ \end{array}$$

Because she didn't pay the bill in full she will have to pay daily interest on any new purchases

$$\begin{array}{l} I = \$ \\ I = \$ \\ I = \$ \end{array}$$

October 7th Total:

Unpaid balance + interest + purchase + interest

$$\begin{array}{r} \$ \\ + \$ \\ + \$ \\ + \$ \\ \hline \$ \end{array}$$





Customer Name: Laurie Smith
 Card Number: 999 8888 7777 1234
 Statement Date: April 2, 2011
 Previous Statement: March 2, 2011

Transaction date	Posting date	Activity description	Amount (\$)
PREVIOUS STATEMENT BALANCE			\$1428.00
Mar 4	Mar 5	PAYMENT – THANK YOU	-\$1428.00
Mar 4	Mar 5	Flights Canada	\$1676.19
Mar 4	Mar 5	Sleep Well Hotel St. John	\$223.59
Mar 4	Mar 5	Sushi St. John	\$63.79
Mar 5	Mar 6	Gas Moncton	\$55.00
Apr 1	Apr 2	Best Save Foods Moncton	\$135.45
Apr 1	Apr 2	Quality Books	\$57.50

Payment information		Calculating your balance	
Minimum payment	\$110.58	Previous balance	\$1428.00
Payment due date	Apr 28	Payments & credits	-\$1428.00
Credit limit	\$5500.00	Purchases	\$2211.52
Available credit	\$3288.48	Cash advances	\$0.00
Annual interest rate	18.50%	Interest	\$0.00
		Other fees	\$0.00
		NEW BALANCE	\$2211.52

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1. What was the previous balance on Laurie's credit card?
2. The payment is shown as -\$1428.00. Why is it a negative number?
3. How was the value of \$2211.52 calculated for the purchases?
4. Did Laurie have to pay any interest in March? Explain.
5. How was the minimum payment calculated?
6. What payment will she have to make on or before April 28 so that she does not have to pay interest? Explain.
7. How is the available credit calculated?

How many days??

August							September						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28	29	30	

There is no overlap on the dates...

Statement Date
<u>27 August 2011 - 26 September 2011</u>
<u>27 July 2011 - 26 August 2011</u>
<u>28 June 2011 - 26 July 2011</u>
<u>27 May 2011 - 27 June 2011</u>
<u>27 April 2011 - 26 May 2011</u>
<u>29 March 2011 - 26 April 2011</u>

so... every day is counted.

From
August 27 to September 26
there are days.