

9.4 Credit Options

There are various forms of credit available to customers. These include bank loans, credit cards and special promotions that have various conditions. When trying to decide which form is best for them, customers should compare credit options with varying interest rates, compounding periods, annual fees and special limited time offers such as "no interest" periods. Amortization tables, spreadsheets and financial applications should be used to determine monthly payments, total cost, total interest, etc., to ultimately determine the most financially sound investment.

It is important for customers to consider the advantages and disadvantages of using ***line of credit***, ***instore financing options*** and ***credit cards*** for purchasing. When making decisions about credit, customers should consider the following points:

- Which borrowing method generally has the lowest interest rate?
- Are you planning on paying the balance off in full at the end each month or carrying forward a balance? How should this factor into your decision?
- Are there any promotions that you can take advantage of?
- Are there any 'hidden' fees?
- Should you pay more than the minimum required payment?
- Which borrowing option is best for large purchases?

Example 1:

Brad and Marie decide to order a home gym online. The order totaled \$2668 and the shipping cost is \$347. They can afford to pay \$200 each month. Which credit card should they use?

- Brad's credit card charges 13.9%, compounded daily, with an annual fee of \$75.
- Marie's credit card charges 19.8%, compounded daily.

The following amortization tables shows the repayment on both credit cards:

Brad:

#/Year	Date	Payment	Interest	Principal	Balance
Loan:	12/01/12				3,015.00
1/01	01/01/13	200.00	37.20	162.80	2,927.20
2/01	02/01/13	200.00	35.24	164.76	2,762.44
3/01	03/01/13	200.00	30.02	169.98	2,592.46
4/01	04/01/13	200.00	31.21	168.79	2,423.67
5/01	05/01/13	200.00	28.23	171.77	2,251.90
6/01	06/01/13	200.00	27.11	172.89	2,079.01
7/01	07/01/13	200.00	24.22	175.78	1,903.23
8/01	08/01/13	200.00	22.91	177.09	1,726.14
9/01	09/01/13	200.00	20.78	179.22	1,546.92
10/01	10/01/13	200.00	18.02	181.98	1,364.94
11/01	11/01/13	200.00	16.43	183.57	1,181.37
12/01	12/01/13	200.00	13.76	186.24	995.13
Y-T-D 2013	12/31/13	2,400.00	305.12	2,094.87	
Running	12/31/13	2,400.00	305.13	2,094.87	
13/02	01/01/14	200.00	11.98	188.02	807.11
14/02	02/01/14	200.00	9.72	190.28	616.83
15/02	03/01/14	200.00	6.70	193.30	423.53
16/02	04/01/14	200.00	5.10	194.90	228.63
17/02	05/01/14	231.29	2.66	228.63	0.00
Y-T-D 2014	12/31/14	1,031.29	36.16	995.13	
Running	12/31/14	3,431.29	341.29	3,090.00	

Marie:

#/Year	Date	Payment	Interest	Principal	Balance
Loan:	12/01/12				3,015.00
1/01	01/01/13	200.00	51.83	148.17	2,866.83
2/01	02/01/13	200.00	49.28	150.72	2,716.11
3/01	03/01/13	200.00	42.14	157.86	2,558.25
4/01	04/01/13	200.00	43.98	156.02	2,402.23
5/01	05/01/13	200.00	39.95	160.05	2,242.18
6/01	06/01/13	200.00	38.55	161.45	2,080.73
7/01	07/01/13	200.00	34.61	165.39	1,915.34
8/01	08/01/13	200.00	32.93	167.07	1,748.27
9/01	09/01/13	200.00	30.06	169.94	1,578.33
10/01	10/01/13	200.00	26.25	173.75	1,404.58
11/01	11/01/13	200.00	24.15	175.85	1,228.73
12/01	12/01/13	200.00	20.44	179.56	1,049.17
-D 2013	12/31/13	2,400.00	434.17	1,965.82	
Running	12/31/13	2,400.00	434.17	1,965.83	
13/02	01/01/14	200.00	18.04	181.96	867.21
14/02	02/01/14	200.00	14.91	185.09	682.12
15/02	03/01/14	200.00	10.58	189.42	492.70
16/02	04/01/14	200.00	8.47	191.53	301.17
17/02	05/01/14	306.18	5.01	301.17	0.00

(A) After the third payment, which credit card option appears to be better? Do you think this will always be the case?

Add up interest for the first 3 months.

$$\text{Brad: } \$102.46 + \$75 = \$177.46$$

$$\text{Marie: } \$143.25$$

(B) At the end of the sixth month, which credit card appears to be better? Discuss your findings.

$$\text{Brad: } \$189.19 + \$75 = \$264.19$$

$$\text{Marie: } \$325.73$$

(C) Overall, which credit card was the better choice and why?

Brad's card is better. Pays less interest.