## The cost of credit

 Handout 6-3
## How interest is calculated on a credit card

- The Visa interest rate is $20 \%$ annually
- The balance owing on this card is $\$ 1000$
- Monthly interest charges are the balance, multiplied by $20 \%$, and divided by 12 months $\$ 1000 \times 0.20 / 12=\$ 16.67$ interest per month
- If you pay the $2 \%$ minimum payment of $\$ 20$, you will only be paying $\$ 3.33$ toward the $\$ 1000$ balance. The rest will go to pay the interest
\$1000 + \$16.67-\$20 = \$996.67 remaining balance
Here is what happens if you make only the minimum $20 \%$ payment for three months:

|  | Payment | To interest | To principal | Balance |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1st month | $\$ 20.00$ | $\$ 16.67$ | $\$ 3.33$ | $\$ 996.67$ |
| 2nd month | $\$ 19.93$ | $\$ 16.61$ | $\$ 3.32$ | $\$ 993.35$ |
| 3rd month | $\$ 19.87$ | $\$ 16.55$ | $\$ 3.32$ | $\$ 990.03$ |

- If you only pay the minimum payment of $\mathbf{2 \%}$ toward your debt each month, it will take you more than 9 years to pay off the debt. This will cost over $\$ 1168$ in interest and the item will cost a total of \$2168.02.

Note: If you paid $\mathbf{\$ 5 . 0 0}$ more each month on this minimum payment, you would pay back the balance $\mathbf{3}$ years and 6 months sooner and save $\$ \mathbf{5 0 6 . 3 5}$ in interest.

## How interest is calculated on a loan

- A $\$ 1000$ loan at $12 \%$ interest, to be paid over a two year period
- Equal monthly instalment payments would be $\$ 47.07$
- Each month, as the balance goes down, you pay less interest and therefore more towards the principal.
- The full payment schedule would include 24 payments. The total interest cost would be \$130.16.

|  | Payment | To interest | To principal | Balance |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1st month | $\$ 47.09$ | $\$ 10.00$ | $\$ 37.09$ | $\$ 962.91$ |
| 2nd month | $\$ 47.09$ | $\$ 9.63$ | $\$ 37.46$ | $\$ 925.46$ |
| 3rd month | $\$ 47.09$ | $\$ 9.25$ | $\$ 37.84$ | $\$ 887.62$ |

The online calculators used to calculate these payments are included in the resources handout for this module.

## The cost of credit

Handout 6-3 (continued)

## Comparing the cost of credit

| Payment method | Cost of item | Interest and fees | Total cost of item |
| :--- | :--- | :--- | :--- |
| Cash or debit | $\$ 1000$ | 0 | $\$ 1,000.00$ |
| Credit card <br> - pay in full by due date | $\$ 1000$ | 0 | $\$ 1000.00$ |
| Credit card <br> - make minimum payment only <br> at 20\% interest | $\$ 1000$ | $\$ 1,104.63$ interest <br> over 10 years | $\$ 2,397.26$ |
| Buy Now, Pay in 1 Year <br> - pay balance in full on time (no interest) | $\$ 1000$ | $\$ 50$ set up fee | $\$ 1,050.00$ |
| Buy Now, Pay in 1 Year <br> -pay balance in full but one week late <br> (28\% interest from date of purchase) | $\$ 1000$ | $\$ 50$ set up fee <br> $\$ 373.09$ interest | $\$ 1,429.09$ |
| Buy Now, Pay in 1 Year <br> begin to make \$100/month <br> payments after due date | $\$ 1000$ | $\$ 50$ set up fee <br> $\$ 1,202.69$ in interest | $\$ 2,252.69$ |

