## Interest

The Australian government's Moneysmart website defines interest as payment for the use of money over time. You earn interest by lending your money, such as leaving it in a bank account. If you borrow money, interest is the amount you pay to borrow the money. The rate of interest can be fixed (interest is paid at a fixed rate over the term of a loan or investment) or variable interest rate (consumers receive interest on an investment or pay interest on a loan at a rate that may go up or down during the term). Interest is usually calculated as a percentage of the amount lent or borrowed. For example, on a \$10,000 car loan that has an interest rate of 10\%, you would pay $\$ 1000$ interest in the first year.

Person 1 has $\$ 5,000$ in savings. They decide to put in an account offering $2.3 \%$ fixed interest. The interest is paid monthly. If they do not withdraw or add any more savings, how much money will be in the account after 12 months? $\qquad$

Person 2 also has $\$ 5,000$ in savings. They decide to put in an account offering $2.5 \%$ variable interest. The interest is paid monthly, however after 4 months the rates drops to $2.15 \%$. If they do not withdraw or add any more savings, how much money will be in the account after 12 months?

Consumers should carefully read the fees and interest charged on loans and credit cards. Credit card 1 has $0 \%$ interest for 12 months. If there is a debt on the card after 12 months, interest is charged at $24 \%$. If a person with credit card 1 has a debt of $\$ 500$ after 12 months, how much interest will they be charged? $\qquad$

Credit card 2 charges $13 \%$ interest at the end of each month. There is also a $\$ 58$ yearly fee to use this credit card. If a person with this credit card has the following debts at the end of each month, how much fees will they pay in a year?

| Month | End of Month Debt |
| :---: | :---: |
| January | $\$ 15$ |
| February | $\$ 0$ |
| March | $\$ 0$ |
| April | $\$ 65$ |
| May | $\$ 5$ |
| June | $\$ 0$ |


| Month | End of Month Debt |
| :---: | :---: |
| July | $\$ 0$ |
| August | $\$ 0$ |
| September | $\$ 0$ |
| October | $\$ 0$ |
| November | $\$ 26$ |
| December | $\$ 150$ |

