## Leasing a car

A car lease lets you drive a new vehicle without paying a large sum of cash or taking out a loan.

## To lease a car you must:

- Make a small down payment
- Make monthly payments until the end of the lease (2-4 years)
- Return the car, or.....
- Some contracts allow you to "lease to own" where you can purchase your car for market value at the end of the lease

| Pros | Cons |
| :---: | :---: |
| - You can get a car to drive even if you don't have the cash to buy one <br> - If you want to drive a car that is out of your price range <br> - Don't want to commit to one car for the long term <br> - Use the car when it is new and problem free <br> - When lease is done, return car and lease another brand new car with the latest technology | - You don't own the car when your lease expires <br> - You are renting, not buying a car <br> - You do not have equity in the car to use towards buying your next car <br> - Limited to 10000-15000 km per year <br> - Lease contracts are strict, and you will pay extra for penalties including: <br> - If you drive more than the agreed upon km's in a year <br> - If you hurt the car's appearance or driving ability <br> - If you want to return the car before the end of your lease |

## How lease rates are calculated:

a) Starts with the "Negotiated Price" of the car, as if you were buying
b) Ends with the "Residual Value" of the car: what the dealership can sell the used car for after you return it
c) What you pay for is the loss in value of the car between when you first "buy" it and when you return it. This is called DEPRECIATION.

Depreciation: The decrease in value of something over time

1) List things that might decrease or increase in value over time. These do not have to be vehicles:

| Decrease in Value | Increase in Value |
| :---: | :---: |
|  |  |
|  |  |

2) If something INCREASES in value over time it $\qquad$ .
3) Examining Depreciation: A new car sells for $\$ 25000$. It loses $20 \%$ of its value from one year to the next. Find out the value of the car at the end of a 5 year lease by completing the table below.

| Year | Value at <br> Beginning of <br> the Year | Depreciation <br> Percent <br> \& Decimal | Amount <br> of <br> Depreciation | Value <br> at End of the <br> Year |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $\$ 25000$ | $20 \% \div 100=$ <br> 0.20 | $25000 \times 0.20=$ <br> $\$ 5000$ | $\$ 25000-\$ 5000$ <br> $=\$ 20 \mathbf{0 0 0}$ |
| 2 | $\$ 20 \mathbf{0 0 0}$ | $20 \% \div 100=$ <br> 0.20 |  |  |
| 3 |  | $20 \% \div 100=$ <br> 0.20 |  |  |
| 4 |  | $20 \% \div 100=$ <br> 0.20 |  |  |
| 5 |  | $20 \% \div 100=$ <br> 0.20 |  |  |

## worksheet

1) Jordan takes advantage of the BMW dealership's special offer to lease a luxury car for $1.9 \%$ interest/year for a 4 year term. The Negotiated Price of the car is $\$ 58000$. Jordan plans to make a down payment of $\$ 2000$.
a) If the dealership says the car depreciates by $15 \%$ per year, calculate the Residual Value of the car at the end of the lease.

| Year | Value at <br> Beginning of <br> the Year | Depreciation <br> Percent <br> \& Decimal | Amount <br> of <br> Depreciation | Value <br> at End of the <br> Year |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $\$ 56000$ | $15 \% \div 100=$ <br> 0.15 | $56000 \times 0.15=$ <br> $\$ 8400$ | $\$ 56000-\$ 8400$ <br> $=\$ 47600$ |
| 2 | $\$ 47600$ | $15 \% \div 100=$ <br> 0.15 |  |  |
| 3 |  | $15 \% \div 100=$ <br> 0.15 |  |  |
| 4 |  | $15 \% \div 100=$ <br> 0.15 |  |  |

b) Using the following formula, calculate how much the car depreciated in total:

Negotiated Price - Residual Value = Total Depreciation
c) Fill in the following table with information about Jordan's lease. You will need to go back to the start of Question \#1 to find the missing information.

| Negotiated Price |  |
| :---: | :---: |
| MSRP |  |
| (enter same number as above) |  |
| Down Payment | $\$ 2000$ |
| Sales Tax in Ontario | $13 \%$ |
| Length of Lease <br> (in months) |  |
| New Car Lending Rate \% |  |
| Car Value at End of the Loan <br> *Residual Value from question a) |  |

d) Go to the following website to use their Lease Calculator:
https://www.bankrate.com/calculators/auto/auto-lease-calculator.aspx
Enter the information from the table above and press "Calculate"
e) What is the monthly payment for the lease?
f) What are the two fees that make up your payment? Write the words and the amount of each.
g) How much money did Jordan pay in total to lease the car for 4 years?



Money Spent Leasing
h) At the end of his lease, if Jordan wants to buy the car he will have to pay the Residual Value of the car plus $13 \%$ tax. Calculate this amount:
i) Calculate how much Jordan will have spent on the car in total by leasing to own.

j) Now calculate what Jordan would have spent on the car in total if he bought it (instead of leasing) and paid cash.

The dealership offers a $\$ 2000$ rebate for cash purchases, so remember to deduct that first from the $\$ 58000$ price before adding on $13 \%$ tax.
k) Compare the total cost for leasing to own and buying. Is it worth it to lease? Explain.

