

Today is the day! You have been saving any spare money that you have had in the last 16 years and now you get to buy your first car! You have enough for a down payment of \$3,000, so the bank has approved you for the following loan financing options:

Compound Interest Formula:

A= _____ P= _____ r= _____ n= _____ t= _____

<p>Option 1: Down Payment of \$2,000; loan approval for \$10,000.-- Car price of \$12,000 or lower.</p>	
<p>Financing A: Interest rate of 4%, compounded semi-annually for 6 years.</p> <p>Equation: _____</p> <p>Final Amount of Loan: _____</p> <p>Number of Monthly Payments: _____</p> <p>Cost of Monthly Payment: _____</p>	<p>Financing B: Interest rate of 3%, compounded monthly for 8 years.</p> <p>Equation: _____</p> <p>Final Amount of Loan: _____</p> <p>Number of Monthly Payments: _____</p> <p>Cost of Monthly Payment: _____</p>

<p>Option 2: Down Payment of \$3,000; loan approval for \$13,000.---Car price of \$16,000 or lower.</p>	
<p>Financing A: Interest rate of 5%, compounded annually for 3 years.</p> <p>Equation: _____</p> <p>Final Amount of Loan: _____</p> <p>Number of Monthly Payments: _____</p> <p>Cost of Monthly Payment: _____</p>	<p>Financing B: Interest rate of 4.2%, compounded weekly for 4 years.</p> <p>Equation: _____</p> <p>Final Amount of Loan: _____</p> <p>Number of Monthly Payments: _____</p> <p>Cost of Monthly Payment: _____</p>

There are many options to consider when making your choice. How much do you want your monthly payment to be? How long do you want to be paying off this loan? How much interest will you be paying (typically we don't want to be paying a lot of interest).

Adulting Tips:

- You don't have to pay interest on your down payment, so the initial in your equation should only be for the loan, not the total cost of the car.
- You aren't prepared to haggle down the cost, so use the listed price of the car you're interested in.

Objective:

Decide what payment financing option will work best for you, and find a car within that budget to present to your parents. Check local ads and dealerships. Create some type of **presentation** to present to your parents with a detailed description of the loan you will be accepting, how compounding works, why this loan is best for you, what your monthly payments are, and why you chose the car you did.