

6.3 PROJECT

CAR LOANS: BRAND NEW OR PRE-OWNED?

According to the Brookings Institution, approximately 76% of working adults in the United States drive to work alone every day. Since owning a car is a big part of our lives, it is important to understand the true cost involved in a car loan. Brand new cars are more expensive but often can be financed at lower interest rates, while pre-owned vehicles cost less but often require a loan at a higher rate. In this activity, you will explore the difference in cost between financing a new vehicle and a pre-owned one.

Consider two options for purchasing a Honda Fit LX in 2020: one was a brand new 2020 model with a manufacturer's suggested retail price (MSRP) of \$17,945, and the other was a pre-owned, two-year-old model listed for \$15,000. Suppose you have saved \$1500 for a down payment and the dealer has already included any applicable fees, including taxes, in the advertised price. You plan on taking 5 years to pay off the loan.

The table below shows the price and interest rate for each option.

	Price	Interest Rate
2020 Honda Fit LX	\$17,945	1.9%
2018 Honda Fit LX	\$15,000	6.9%

For both the new and the pre-owned Honda Fit LX options, do the following.

1. Compute the amount to be financed considering that you have saved \$1500 for a down payment.
2. Use the formula for a regular payment on a fixed installment loan to determine the monthly payment. Round your answer to the nearest dollar.
3. Determine the total amount paid when repaying the car loan.
4. Determine the finance charge for each purchasing option. This is the difference between the total amount paid on the loan and the amount financed.
5. Complete the following table.

	2020 Honda Fit LX	2018 Honda Fit LX
Price	\$17,945	\$15,000
Interest Rate	1.9%	6.9%
Down Payment		
Amount Financed		
Monthly Payment		
Total Amount Paid		
Finance Charge		

6. The pre-owned car definitely has a lower monthly payment, which might sound appealing when budgeting your expenses. Could you make an argument, using the values in your table, that the money borrowed to purchase the pre-owned vehicle is actually "more expensive" than the money borrowed to purchase the new vehicle? Explain your reasoning.