Activity 2: Total Cost of Payday Loans (ANSWER KEY)

Use the equation for calculating the total cost of a payday loan to solve the problems below. Be sure to show your work.

Total cost = Loan amount + finance charge(1 + Number of rollovers or renewals)

$$T = L + F(1+R)$$

1. Laura takes out a payday loan to pay for her son's emergency room bill of $400. The payday lender charges her $60 for every two weeks. She has to rollover the loan 5 times before she can finally pay it off. What was the total cost of her loan?

    Solving T = L + F(1+R) for T where L = 400, F = 60, and R = 5

    $$T = 400 + 60(1+5)$$

    $$T = 400 + 60(6)$$

    $$T = 400 + 360$$

    $$T = 760$$

    The total cost of Laura's loan was $760.

2. Sarina needs a new set of tires to pass inspection. The bill is $350. She needs her car to get to work and doesn't have enough money to cover the bill. She takes out a payday loan that will cost her $15 for every $100 she borrows for two weeks. She pays off the bill after four weeks. What is the total cost of her loan?

    First determine the finance charge (F). If the loan costs $15 for every $100 borrowed and she borrows $350, then L = 15*3.5= 52.5.

    Next determine the number of rollovers. The problems says she pays the finance charge every two weeks and that it will take her four weeks to pay it off. She will pay the initial finance charge and then one rollover.

    Next, solve T = L + F(1+R) for T where L = 350, F = 52.5, and R = 1.

    $$T = 350 + 52.5(1+1)$$

    $$T = 350 +52.5(2)$$

    $$T = 350 + 105$$

    $$T = 455$$

The total cost of Sarina's loan was $450.

3. Rico complained to his brother that he had to rollover a payday loan seven times before finally saving enough money to pay it off. In the end it cost him $450. What finance charge was Rico paying the payday lender every two weeks if he originally wanted to borrow $250?

Next, solve T = L + F(1+R) for F where T = 450, L = 250, and R = 7.

$$450 = 250 + F(7+1)$$

$$450 = 250 + 8F$$

$$200 = 8F$$

$$F = 25$$

Rico was charged a finance charge of $25 every two weeks.