

BUILDING BLOCKS STUDENT WORKSHEET

Shopping in Credit City

When you borrow money to buy items (instead of paying cash), the total cost to own that item can increase.

Instructions

1. Read the scenario on the right.
2. Roll a single die to determine the price you'll pay (principal) for each item.
 - a. Multiply the number on the die by 100 to get the price.
3. If you roll a 1 or a 2, you'll be able to pay cash for your purchase. In Credit City, you can pay cash for items that cost \$100 or \$200. In this case, record the price in the appropriate field and move on to the next item.
4. If you roll a 3 or higher, you'll have to charge the purchase to your credit card. To calculate the charge, you'll need to roll the die two more times:
 - a. Roll to determine the interest rate you'll be charged (rate).
 - i. Multiply the number on the die by 3 to get the interest rate.
 - b. Roll to determine how long you will need to pay this off (time).
 - i. Multiply the number on the die by 4 to get the number of months.
5. Use a calculator and apply the oversimplified interest formula in the tables below to come up with total loan amounts and monthly payments.
6. Summarize your shopping experience in Credit City.

i SCENARIO

You've just moved into your own apartment in Credit City. Because of your steady job, you've saved \$2,000 and you can purchase some items you've always wanted: a couch, a big-screen TV, a smart watch, and a queen-size bed. However, in Credit City, the law says you cannot pay cash for any item that costs \$300 or more. Instead, you'll need to use a credit card to buy those items. You like living in this city, so you'll need to follow their credit rules, but you're concerned about how much you may end up paying for these items once interest is factored in.



Item #1: A new couch

Price (P)	\$
Interest rate (R)	%
Length of the loan (T)	Months
Estimated interest you'll pay ($I = P \times R \times T$)	\$
Total amount of the loan ($P + I$)	\$
Monthly payment (Total loan \div # months in the loan)	\$



Item #2: A big-screen TV

Price (P)	\$
Interest rate (R)	%
Length of the loan (T)	Months
Estimated interest you'll pay ($I = P \times R \times T$)	\$
Total amount of the loan ($P + I$)	\$
Monthly payment (Total loan \div # months in the loan)	\$



Item #3: A smart watch

Price (P)	\$
Interest rate (R)	%
Length of the loan (T)	Months
Estimated interest you'll pay ($I = P \times R \times T$)	\$
Total amount of the loan ($P + I$)	\$
Monthly payment (Total loan \div # months in the loan)	\$



Item #4: A queen-size bed

Price (P)	\$
Interest rate (R)	%
Length of the loan (T)	Months
Estimated interest you'll pay ($I = P \times R \times T$)	\$
Total amount of the loan ($P + I$)	\$
Monthly payment (Total loan \div # months in the loan)	\$

Reflection questions

Evaluate your shopping experience by answering these questions.

1. How much did you end up paying for all four purchases? (Add the cash and credit totals.)

2. How much interest did you end up paying for any items you bought on your credit card?

3. For how many items were you able to pay cash? How did this make you feel?

4. How much would you save if you were able to pay cash for all four items instead of using credit for the purchases?

5. Imagine you lived in a city where you couldn't use credit, and you wanted to pay cash for all purchases. Would you have enough money to buy all four items? If not, what decisions would you make about what to get now and what to buy later? Share your thinking.

6. After completing this activity, what might you say about the pros and cons of making purchases with cash or credit cards to buy what you want or need? Share your thinking.