

Costs of Credit
40 points

Name _____ Class _____

Annual Percentage Rate (APR) is the rate of interest for a year. Credit card companies, banks and other lenders have different rates. The following example shows how to calculate the APR and monthly payments for one year on a \$1,000 loan.

EXAMPLE: Amount of Loan: \$1,000
Length of Loan: 1 year (12 months)
Annual Percentage Rate (APR): 7.5%

Amount of Loan	\$1,000	Amount of Loan	\$1,000	Total to repay	\$1,075
X APR	<u>.075</u>	+ finance charge	<u>75</u>	/ (divided by) months	<u>12</u>
= finance charge	\$ 75	= total to repay	\$1,075	= monthly payment	\$89.58
(same as interest)					

DIRECTIONS: Follow the example to calculate the interest, total payment, and monthly payments with each lender on a \$2,000 loan for 1 year. SHOW YOUR WORK. Round your answers. 5 points each problem.

ABC Bank
6.9% APR

Finance Charge \$ 138

Total to Repay \$ 2138

Monthly Payment \$ 178.17

$2000 \times .069 + 2000 / 12$

XYZ Bank
8.5% APR

Finance Charge \$ 170

Total to Repay \$ 2170

Monthly Payment \$ 180.83

$2000 \times .085 + 2000 / 12$

RST Loan Company
18.5% APR

Finance Charge \$ 370

Total to Repay \$ 2370

Monthly Payment \$ 197.50

$2000 \times .185 + 2000 / 12$

CDE Credit Company
11.5% APR

Finance Charge \$ 230

Total to Repay \$ 2230

Monthly Payment \$ 185.83

$2000 \times .115 + 2000 / 12$

The difference between the most and least expensive lenders is \$ 232
 $\$2370 - \$2138 =$

EXTENDED LEARNING:

Read each of the following problems closely and calculate the necessary answers.
SHOW YOUR WORK FOR EACH PROBLEM.

1. You will need to finance \$500 for just 6 months at an APR of 8.5%.

Finance Charge \$ 21.25 $500 \times (.085 / 2 = .0425) + 500 / 6$

Total to Repay \$ 521.25

Monthly Payment \$ 86.88

2. You have purchased a \$3,500 car and your mother agrees to finance it for you at just 5% APR for 3 years.

Finance Charge \$ 525 $3,500 \times .05 \times 3 + 3,500 / 36$

Total to Repay \$ 4025

Monthly Payment \$ 111.81

3. You will make monthly payments of \$109 for 1 year to pay back a \$1,200 loan.

Total to Repay \$ 1308 109×12

Finance Charge \$ 108 $1308 - 1200$

APR 9 % $108 / 1200$

4. You will pay \$111.75 in finance charges and a total of \$861.75 over the next 12 months.

Original Loan \$ 750 $861.75 - 111.75$

APR 14.9 % $111.75 / 750$

Monthly Payment \$ 71.88 $861.75 / 12$