

## 10-12 – Extension Activity for *Debt Decisions*

### Specific Outcome(s)

- Career and Life Management
  - R8. Evaluate the advantages and disadvantages of credit
    - Examine the costs of using credit, the dangers of overextended buying and the impact of credit ratings
- Mathematics 10-3
  - N5. Demonstrate an understanding of credit options, including
    - Credit cards
    - Loans

At the end of this extension activity, students will be able to calculate debt ratios and explain how knowing one's debt ratio helps them to use credit wisely.

### Materials Needed

- Calculators

### Materials Provided

- Calculating Debt Ratios handout

### Logistics

- Photocopy the Calculating Debt Ratios handout 😊
  - Print enough copies for each student.

### Procedure

- Remind students of the definitions of credit and debt.
- Explain what a debt ratio is: "A debt ratio is the ratio of your income to your debts. It's good to keep your consumer debt payments (this excludes mortgages) below 20-28% of your gross monthly income."
- Show students how to calculate a debt ratio.
  - "Alex has \$635 in monthly student loan payments, \$423 in monthly auto loan payments, and \$5,321 in monthly gross income."
    - Step 1: Calculate monthly payments.  $\$635 + \$423 = \$1,058$
    - Step 2: Determine ratio.  $\$1,058 \div \$5,321 \times 100 = 20\%$  (rounded)
- Have students practice calculating debt ratios using the provided handout.
  - Circulate and help students as needed.
  - Review the answers with them when most of them are done.
- When ready, ask the following review questions to solidify students' learning:
  - "Which people have a high debt ratio? On what should they focus?"
  - "How does knowing your debt ratio contribute to using credit wisely?"

## Calculating Debt Ratios

Using the following tables, calculate each person's debt ratio. Show all work.

| Consumer Debt Payments              | Monthly Amount |
|-------------------------------------|----------------|
| Monthly Auto Loan Payment           | \$1,380.00     |
| Monthly Student Loan Payments       | \$1,200.83     |
| Average Monthly Credit Card Payment | \$123.44       |
| <b>Monthly Gross Income</b>         |                |
| \$5,632.00                          |                |

What is this person's debt ratio?

| Consumer Debt Payments              | Monthly Amount |
|-------------------------------------|----------------|
| Average Monthly Credit Card Payment | \$452.63       |
| Monthly Auto Loan Payment           | \$644.36       |
| <b>Monthly Gross Income</b>         |                |
| \$2,284.00                          |                |

What is this person's debt ratio?

| Consumer Debt Payments              | Monthly Amount |
|-------------------------------------|----------------|
| Average Monthly Credit Card Payment | \$253.87       |
| <b>Monthly Gross Income</b>         |                |
| \$874.00                            |                |

What is this person's debt ratio?

## Calculating Debt Ratios

Using the following tables, calculate each person's debt ratio. Show all work.

| Consumer Debt Payments              | Monthly Amount |
|-------------------------------------|----------------|
| Monthly Auto Loan Payment           | \$1,380.00     |
| Monthly Student Loan Payments       | \$1,200.83     |
| Average Monthly Credit Card Payment | \$123.44       |
| <b>Monthly Gross Income</b>         |                |
| \$5,632.00                          |                |

What is this person's debt ratio?

$$\$1,380.00 + \$1,200.83 + \$123.44 = \$2,704.27$$

$$\$2,704.27 \div \$5,632.00 \times 100 = 48\%$$

| Consumer Debt Payments              | Monthly Amount |
|-------------------------------------|----------------|
| Average Monthly Credit Card Payment | \$452.63       |
| Monthly Auto Loan Payment           | \$644.36       |
| <b>Monthly Gross Income</b>         |                |
| \$4,284.00                          |                |

What is this person's debt ratio?

$$\$452.63 + \$644.36 = \$1,096.99$$

$$\$1,096.99 \div \$4,284.00 \times 100 = 26\%$$

| Consumer Debt Payments              | Monthly Amount |
|-------------------------------------|----------------|
| Average Monthly Credit Card Payment | \$253.87       |
| <b>Monthly Gross Income</b>         |                |
| \$874.00                            |                |

What is this person's debt ratio?

$$\$253.87 \div \$874.00 \times 100 = 29\%$$