

NOT EVERYTHING IS MORE EXPENSIVE

OUTCOMES

Students will calculate percent increase or decrease.

GED DESCRIPTORS

Language Arts-Reading
Social Studies
Science
Mathematics
Language Arts-Writing

ROLES

Family Worker Community

PROGRAM TYPE

ABE Urban
GED Rural
ESOL Homeless
Family Literacy Institutional
Workforce Corrections

LEARNER LEVEL

4-5

KEYWORDS

754: Math
1128: Math > money

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TECHNOLOGY INTEGRATION

What Things Cost 1960sflashback.com; 1970sflashback.com

STANDARD: Use Math to Solve Problems and Communicate

COPS

Understand, interpret, and work with pictures, numbers, and symbolic information.

Apply knowledge of mathematical concepts and procedures to figure out how to answer a question, solve a problem, make a prediction, or carry out a task that has a mathematical dimension.

Define and select data to be used in solving the problem.

Determine the degree of precision required by the situation.

Solve problem using appropriate quantitative procedures and verify that the results are reasonable.

Communicate results using a variety of mathematical representations, including graphs, chart, tables, and algebraic models.

ACTIVITY ADDRESSES COMPONENTS

Students will recall and select prices of various items.

Students will apply the formula for the percent increase/decrease to the changing prices of items.

Choose years to calculate the prices.

Decide to use two decimal places since these problems are involving money.

Find the percent increase or decrease for selected items.

Orally share the results of their calculations.
Complete textbook assignment.

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<p>OUTCOMES Students will calculate percent increase or decrease.</p>	<p>STUDENT GOALS When students shop, they need to compare the prices of many items and calculate the percent increase or decrease in order to make wise purchases.</p>	<p>MATERIALS Current grocery store ads Board or overhead projector</p> <p>NRS 4-5 TIME FRAME 40-45 minute</p>
<p>STANDARD <i>Use Math to Solve Problems and Communicate</i></p>	<p>LEARNER PRIOR KNOWLEDGE Students are able to identify and write ratios and proportions. They use ratio and proportion to solve percent problems.</p>	
<p>COPS</p> <p>Understand, interpret, and work with pictures, numbers, and symbolic information.</p> <p>Apply knowledge of mathematical concepts and procedures to figure out how to answer a question, solve a problem, make a prediction, or carry out a task that has a mathematical dimension.</p> <p>Define and select data to be used in solving the problem.</p> <p>Determine the degree of precision required by the situation.</p> <p>Solve problem using appropriate quantitative procedures and verify that the results are reasonable.</p> <p>Communicate results using a variety of mathematical representations, including graphs, chart, tables, and algebraic models.</p>	<p>ACTIVITIES/CURRICULAR RESOURCES [REAL-LIFE APPLICATIONS]</p> <p>Step 1 - Students should suggest items that have reduced prices over the past few years. List items, year purchased and the purchase price on the board or overhead transparency. (Suggested items: CD players, digital cameras, calculators, TVs, etc.)</p> <p>Step 2 - Teacher will introduce the percent increase/decrease formula. $\frac{\text{Amount of increase or decrease}}{\text{Original Price}} = \frac{\text{Percent}}{100}$ </p> <p>Teacher will demonstrate (model) this formula using some of the student data.</p> <p>Step 3 - Students will calculate the percent decrease in prices for the items listed on the board.</p> <p>Step 4 - Students will examine current grocery store ads and select some frequently purchased items (e.g., bread, eggs, fruit). They will use the Internet and find the prices for these same items for a different year. Then they will calculate the percent increase using the formula.</p> <p>Step 5 - Using the same Internet sources, students will find the average annual income from the year used for Step 4 and for 2005 (or the current year). Students will calculate the percent increase in wages/income.</p> <p>Step 6 – Teachers can use an exercise from a GED textbook for additional practice of percent increase or decrease.</p> <p>WRITING EXTENSION Write an explanation for the decrease in prices for electronics and the increase in prices for food items or staples.</p>	<p>ASSESSMENT/EVIDENCE</p> <p>Teacher observation</p> <p>Calculation of percent increase or decrease in prices.</p>

REFLECTION/EVALUATION
not yet completed

PURPOSEFUL & TRANSPARENT
This activity applies to the math standard.

NEXT STEPS

CONTEXTUAL
This plan is related to real life-everyone eats, grocery shops, etc. Students can apply this to planning future purchases.

BUILDING EXPERTISE
The plan builds on the students' knowledge of ratio and proportion.