

UNIT 9 *Consumer Arithmetic*

Introduction to SIM

Learning objectives

The work in this unit shows the importance of arithmetic to a variety of contexts and problems in everyday life, including buying, paying for and selling items, earning, saving, investing and exchanging money. After completing this unit of STUDENT INSTRUCTIONAL MATERIAL (SIM) you should be able to

- understand and calculate GCT (and VAT) charged on items
- understand and apply hire purchase methods
- appreciate and apply the concepts of hourly and overtime rates of pay
- calculate currency exchanges to and from J\$ (and other currencies)
- calculate both simple and compound interest on investment accounts.

Key points and principles

- Hire purchase: in which an item is purchased by paying a deposit and then a specified number of regular instalments
- VAT (Value Added Tax) and GCT (General Consumption Tax): the tax added by the government when a consumer buys certain goods; in Jamaica GCT is currently $17\frac{1}{2}\%$ (September 2010)

Facts to remember

- GCT in Jamaica is currently $17\frac{1}{2}\%$, payable on most non-food items
- With simple interest, the interest earned is paid out and not added to the investment; with compound interest, the interest is added to the account and future interest accrues (is calculated) on the total sum.

Glossary of terms

- *Hire purchase*: in which an item is purchased by paying a deposit and then a specified number of regular instalments
- *VAT (Value Added Tax) and GCT (General Consumption Tax)*: the tax added by the government when a consumer buys certain goods; in Jamaica GCT is currently $17\frac{1}{2}\%$
- *Simple interest*: the amount of interest earned over a specified period on money invested. For example, for J\$1000 invested for one year at 10% interest rate the investor would be paid J\$100 at the end of the year
- *Compound interest*: interest earned is added to the account (compounded). In the example above, the J\$100 interest earned at the end of the first year would be added to the account and so interest would be calculated on J\$1100 in the second year, giving a balance at the end of year 2 of J\$1210, etc.