

# SHARP

## Worksheet 3 – Income and Expenditure

### Mathematical Literacy – Grade 10

1. Mr and Mrs Bokopane have decided that they need to start saving money to go on holiday in December, they decide that the best way to do this would be to draw up a budget and work out how much money they are able to save for the holiday. They decide to put all the money left over after their expenses into their holiday.

TABLE 1: The Bokopane's budget for June 2012 to November 2012

MONTHLY INCOME		MONTHLY EXPENDITURE	
Salary after deductions	R 23 800	Pension	R 1 260
Rent Income	R 4 350	Medical aid	R 5 600
		Insurance	R 2 320
		Rates and Taxes	R 1 420
		Water and refuse	R 340
		Electricity	R 1 150
		Car repayment	R 2 950
		School fees	R 1 400
		Food	R 2 900
		Clothing	R 850
		Petrol	R 1 250
		Entertainment	R 900
		Cell phone	R 800
		Maintenance on rental unit	R 750
		Saving (9 % of total income)	
<b>TOTAL</b>	<b>R 28 150</b>	<b>TOTAL</b>	
		Holiday budget	

- Calculate the amount of money that the Bokopane family put into savings every month.
- Calculate the total expenditure of the Bokopane household.
- Mr and Mrs Bokopane save for their holiday for 6 months, calculate the total amount of money saved for their holiday.
- The Bokopane family found 3 different accommodation options for their holiday. Use the information below to choose the best accommodation option for the family. The family have decided they will stay over for 7 nights and they

have found out that the cost of a meal for 4 people will be a minimum of R 400.

The family will pack sandwiches for lunch

**OPTION 1**

Cosy Bed and Breakfast offers accommodation for R 750/day for the entire family. This cost includes only breakfast.

**OPTION 2**

Waterfall Hotel offers accommodation for R 1400/day for the entire family, this includes all meals and access to many entertainment facilities.

**OPTION 3**

Misty Mountain Luxury Villas offers accommodation for R 370/person per day. This includes a buffet breakfast and spa treatments.

2. The Bokopane family decide that after their holiday they will keep saving the same amount of money, after 5 months Mr Bokopane realises that he could put his money into an interest bearing account to maximise his savings.
  - a) How much money does Mr Bokopane have to put into savings after 5 months?
  - b) Calculate the interest earned by Mr Bokopane over 6 months when the interest rate is 9% per annum.
  
3. Mr Bokopane gets a raise and his salary after deductions increases to R 28 460.
  - a) Calculate the total income of the Bokopane family.
  - b) Mr Bokopane decides to buy a second car, he can get a new car for R 135 000 on 11% interest over 5 years. What will his monthly car repayments be?