Financial Literacy

KEY TERMS

Learn these words first. EQAO questions often test whether you understand what the math language means.

Income
Money received, such as wages, allowance or earnings.
Ex: $600 paycheque

Expense
Money spent on goods, services or obligations.
Ex: rent, food, transit

Fixed Expense
A cost that usually stays the same each period.
Ex: $70 phone plan

Variable Expense
A cost that can change from period to period.
Ex: groceries, entertainment

Budget
A plan for how income will be earned, spent and saved.
Ex: monthly money plan

Surplus
Money left after expenses are subtracted from income.
Ex: income > expenses

Deficit
A shortage when expenses are greater than income.
Ex: expenses > income

Principal
The original amount borrowed or invested.
Ex: P = $1,000

Interest
Money paid for borrowing or earned for saving/investing.
Ex: $50 interest

Interest Rate
The percent of the principal charged or earned over a stated period.
Ex: 5% per year

Simple Interest
Interest calculated only on the original principal.
Ex: $I = Prt$

Loan
Money borrowed that must be repaid, usually with interest.
Ex: car loan

Down Payment
Money paid up front, reducing the amount that must be financed.
Ex: $2,000 down

Financing
Paying for a purchase over time, usually through borrowing.
Ex: monthly payments

Total Cost of Borrowing
The extra money paid above the amount originally borrowed.
Ex: interest + fees

Appreciation
An increase in value over time.
Ex: home value rises

Depreciation
A decrease in value over time.
Ex: car value falls

Discount
A reduction from the original price.
Ex: 20% off

Sales Tax
A percent added to the purchase price.
Ex: 13% HST in Ontario

Unit Price
The cost for one unit, used to compare package values.
Ex: $2.40 per 100 g

KEY CONCEPTS & DEFINITIONS

A Budget Is a Decision Tool
A budget shows where money is going and helps you decide what to change when income or expenses change.

Income - expenses = surplus or deficit.

Borrowing Has a Total Cost
A lower monthly payment can still cost more overall if the loan lasts longer or has a higher interest rate.

Compare total paid, not only monthly payment.

Percent Changes Need a Reference
Discount, tax, appreciation and depreciation are calculated from a specific starting amount.

Identify the original value first.

Financial Choices Have Trade-offs
A larger down payment lowers the amount borrowed but uses more cash today. Good decisions depend on the situation.

Compare options using the same time period.

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FORMULAS & RULES

BUDGET BALANCE

balance = income - expenses

Positive = surplus; negative = deficit.

SIMPLE INTEREST

I = P r t

P = principal, r = decimal rate, t = time.

FINAL AMOUNT

A = P + I

For simple interest, add interest to the principal.

PERCENT PRICE CHANGE

new price = original x (1 +/- rate)

Use - for discounts/depreciation; + for tax/appreciation.

VISUALS & FAST FACTS

VISUAL MEMORY AID: A SIMPLE BUDGET FLOW

INCOME → MINUS EXPENSES → = → SURPLUS / DEFICIT

Positive result = surplus | Negative result = deficit

FAST FACTS: Convert a percent rate to a decimal before multiplying. | Compare loan options using total cost, rate and term. | A budget should change when circumstances change.

THREE WORKED EXAMPLES

1

Budget Balance

Monthly income is $1,900 and expenses are $1,650.

- Balance = income - expenses.
- 1,900 - 1,650 = 250.
- The result is positive, so it is a surplus.

ANSWER
$250 surplus

2

Simple Interest

Find interest on $1,200 at 5% for 2 years.

- Convert 5% to 0.05.
- I = Prt = 1200(0.05)(2).
- I = 120.

ANSWER
$120 interest

3

Discount + Tax

A $100 item is 20% off, then 13% tax is added.

- Discounted price = 100(0.80) = 80.
- Tax = 80(0.13) = 10.40.
- Final price = 80 + 10.40.

ANSWER
$90.40