Factory/works control office

HYACINTH TUGMAN
Contributor

THE PURPOSES of the factory office are to coordinate the activities of the production process to allow for maximum efficiency and to make quality products in the required quantities. The size of the factory office is generally determined by the manufacturing or production activities that take place in a company. In a large company, there is usually a production department managed by a production manager, who oversees:

- Manufacturing of articles
- Organisation and management of the factory
- Factory and production planning
- Dispatch and transportation
- Stock room
- Maintenance of good office services

RELATIONSHIP OF THE FACTORY OFFICE WITH OTHER DEPARTMENTS

SALES DEPARTMENT

It is important for the factory office to maintain a close relationship with the sales office so that when orders are made, the sales department can check carefully and present information to the accountant for clearing (or verification and credit worthiness). Sales invoices are then prepared, after which copies are sent to the dispatch and transport section of the factory office for processing.

PURCHASING DEPARTMENT

It is the responsibility of the purchasing department to obtain tools and materials for the factory. Therefore, the factory office clerk should be in constant dialogue with the purchasing department, reporting on the status of these. If the factory experiences difficulty in obtaining constant supplies of raw materials from its suppliers, the 'progress-chasing' clerks work diligently with the purchasing department to locate the materials or to find suitable substitutes. The aim is to keep the production line going, thus ensuring that the customer has continued supplies of the commodity.

STOCK ROOM

The stock room is essential to the production department as items produced must be carefully stocked away until they are ready to be dispatched to various customers. Raw materials, too, need to be stocked in sufficient quantities so that the production process is not jeopardised.

ACCOUNTS DEPARTMENT

The accounting department must be involved in the estimating, costing and general budgeting activities for goods production. A factory office clerk must, in some cases, record factory workers' hours of regular and overtime work and the information passed on to the accounts department for payment to be prepared.

HUMAN RESOURCES DEPARTMENT

This department is responsible for the recruitment, selection, orientation and induction of workers, as well as their welfare and ongoing training.

FUNCTIONS OF THE FACTORY OFFICE

1. ORGANISATION OF PRODUCTION ACTIVITIES

The major function of the factory office is the organisation of production activities. This is because the office brings together production principles and processes, production staff, production procedures, production materials, machinery and tools, company policies and objectives, as well as statutory rules and regulations in the creation of articles for consumption.

The office, therefore, has responsibility for:

a. Planning and supervising all types of manufacturing.
b. Maintaining suitable procedures for the control of production.
c. Maintaining an appropriate level of discipline in the factory.
d. Maintaining the factory, including power supply, plant, equipment, machinery, tools and buildings.
e. Maintaining an excellent transportation system.
f. Suggesting ways in which improvements can be made.

2. IMPLEMENTATION

Production planning is just one major function of manufacturing goods. Implementation requires the control of various activities. The two important activities are:

a. Instructing supervisors with regard to what is to be produced and when production is to commence.

b. Discussing the method of how production is to be utilised, e.g.:

i. Batch Production – The making of a number of similar items at the same time. For example, a batch of an item is produced for a week, and then the production team moves on to something else.

ii. Mass/Flow Production – This involves the production of large quantities of goods to cater to a mass demand. Clothing, shoes and cars are usually mass-produced. This method is referred to as an assembly line operation.

iii. One-line Production – From time to time, factories sign contracts with customers for the production of single 'non-repeated' products, as well as a few articles of a similar design, for example, a piece of furniture or a piece of artwork.

Next week, we will look at the documents used in the factory and duties of the factory clerk.

Until then, see you.

Hyacinth Tugman is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

Social accounting and global trade 1

YVONNE HARVEY
Contributor

HI EVERYONE. This week, we will begin a new section of the syllabus: Social Accounting and Global Trade, Section 9. The topics that we will be looking at include: the standard of living, quality of life, national income, economic growth and development International trade and balance of payments. Continue to enjoy the subject.

STANDARD OF LIVING

Standard of living refers to the level of living which a person, family or whole nation maintains in terms of the various amounts and kinds of goods and services consumed. Standard of living varies from person to person, family to family and nation to nation. It also varies over time. The national standard of living means the average standard of living of all the persons living in that country.

QUALITY OF LIFE

Quality of life looks at the extent to which a person, family or nation enjoys the benefits of its wealth. A country may have a high standard of living, in terms of being able to provide many goods and services for its people, but the quality of life may be low if the people are not able to access the wealth provided.

Laurel Whyte (right), promotions and events officer at JN Bank, converses with Rema Downes (centre), senior teacher and grade coordinator at the St Elizabeth Technical High School (STETHS), and Nuirka Dunkley, lower sixth form student at STETHS.

FACTORS INDICATING STANDARD OF LIVING WEALTH OF A COUNTRY

■ The level of consumption of goods and services: Generally speaking, the greater the amount of goods and services consumed, the higher the standard of living will be. The counter-argument to this is that the quality of the goods and services may have deteriorated while the level of consumption increased. The question, therefore, would be: Did the standard of living really increase?

■ **Average disposable income of the population:** Disposable income refers to net income – the amount of money that is available to be used as one would like to. In economics, disposable income is either spent on consumption goods and services or saved. As far as standard of living is concerned, the higher the average disposable income of the population, the higher the standard of living will be. The counter-argument here is that the disposable income may be high, but if it is unequally distributed, many people may have a low standard of living.

■ **The level of national ownership of capital equipment:** As a country increases its ownership of capital equipment, it is able to produce more goods and services and, thereby, increase its standard of living. However, this means that it will first have to save or refrain from consumption in order to accumulate this capital. During this time, the standard of living may fall.

■ **Access to modern technology:** Modern technology enables a country to produce more and to produce more efficiently, thereby increasing standard of living. However, for developing countries like Jamaica, the cost and maintenance of modern technology is high, and it often results in loss of jobs, which, in turn, means a lower standard of living.

■ **The level of investment in research and technology:** The more a country spends money on research and technology, the greater will be its improvements in level and quality of goods and services, and then, the greater will be the standard of living. Again, however, cost becomes a dominant factor as research and technology can be very costly.

INDICATORS OF A COUNTRY'S QUALITY OF LIFE

Quality of life refers to the extent to which the country enjoys the benefits of its wealth. The factors that affect this include:

■ **The extent of security enjoyed:** The greater the level of security enjoyed by the citizens, the greater will be the quality of life. High levels of crime can prevent citizens from accessing the wealth that will increase their quality of life.

■ **The availability of health, educational and recreational facilities:** Greater access to these will surely increase the quality of life. Access, however, may be dependent on the ability to pay. Governments can increase a nation's access to these areas by subsidising the cost or by providing them free of cost.

■ **Diet and nutrition:** The amount of food and drink is not the important thing as far as quality of life is concerned. If people are not having balanced meals, then their diet and nutrition will be poor, and the quality of life will fall, even if they are consuming more.

■ **Life expectancy:** This refers to the average number of years a person is expected to live. If people are expected to live longer than before, it means that the quality of life has, in fact, increased.

■ **The rate of infant mortality:** Infant mortality refers to death among infants. If a country is experiencing reduced death rates among infants, then the quality of life has increased. This could be because of improved research in health and improved health or greater access to healthcare.

■ **Access to public utilities:** The greater the access to public utilities, such as electricity and portable water, the greater will be the quality of life. If only a few persons in a country have access to these utilities, then, generally speaking, the quality of life will be very low.

Well, that is it for this week. Next week, we will continue with this section by considering national income. I hope you are studying for the external exams. Those of you who will only be doing internal exams this year also need to be studying. Do not wait until the night before the exam to go over the topics. Take care until next week.

Yvonne Harvey is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

Analytical petty cash book and the imprest system

ROXANNE WRIGHT
Contributor

IN ALMOST All businesses, the cashier or petty cashier is given a small sum of money for the sole purpose of meeting small/petty expenses such as postage, cleaning, petrol, travelling expenses and other miscellaneous and sundry expenses. The book in which the petty cash expenditure is recorded is known as the petty cash book.

The petty cash book is maintained on a columnar basis, i.e.:

1. A separate column being allotted for each type of expense.
2. There is only one money column on the debit side, in which all monies received by the petty cashier are entered.
3. The credit side has several analysis columns.
4. Every payment made by the cashier is entered on the credit side twice:
   i. The amount is recorded in the total column.
   ii. The amount is recorded in the appropriate column to which the expense is concerned.
5. The total of the 'total column' must agree with the total of all subsidiary columns.
6. The difference between the total of the debit items and the 'total column' on the credit side at any time represents the balance of the petty cash in hand.
7. This total of the petty cash in hand should tally with the petty cashier's actual cash in hand.

The posting from the petty cash book to the respective accounts in the ledger is made directly and in total at the end of every month or on the fixed day or any other date dictated by the business.

THE IMPREST SYSTEM

Under this system, a float, also known as a fixed sum of money, is given to the petty cashier to cover the petty expenses for the month. At the end of the month, a statement of petty expenses is submitted to the accountant by the petty cashier. Upon receiving the statement, the accountant refunds the petty cashier the exact amount spent during the month, thus making the imprest for the next month as it was at the beginning of the previous month. The amount of cash in the hand of the petty cashier is a part of the cash balance and, therefore, must be included in the cash balance when the cash balance is shown in the trial balance and the balance sheet. The petty cash book is a branch of the cash book.

The main advantages of the imprest system of the petty cash are:

a. It acts as a healthy and reliable check on the petty cashier as the petty cashier has to produce the petty cash book, accompanied with the vouchers, for inspection to enable refund/reimbursement.

b. The petty cashier cash book must be kept up to date to account for all expenses paid for before further funds will be disbursed.

The accumulation of cash in hand by the petty cashier is minimal, thus, the chances of defalcation of cash are minimised.

Format of the petty cash book:

Receipt	Folio	Date	Details	Voucher number	Total	Motor expenses	Staff travelling	Postage	Cleaning expense	Ledger folio	Ledger accounts
$		2010			$	$	$	$	$		$

WORKED EXAMPLE

Record the following transactions in a petty cash book.

2015		$
Nov. 1	The cashier gave the petty cashier $1 200 as float.	
Nov. 2	Petrol	126
Nov. 3	K. Sherman – travelling expenses	64
Nov. 3	Postage	48
Nov. 4	D. Chambers – travelling expenses	22
Nov. 7	Cleaning expense	30
Nov. 9	Petrol	38
Nov. 12	K. Lyn Cooke – travelling expenses	60
Nov. 14	Petrol	70
Nov. 15	L. Williams – refund: sales ledger account overpaid	100
Nov. 16	Cleaning expense	30
Nov. 18	Petrol	48
Nov. 20	Postage	56
Nov. 22	Cleaning expenses	38
Nov. 24	H. Mulling - travelling expenses	150
Nov. 27	Settlement of K. Young's account in the purchases ledger	66
Nov. 29	Postage	44

SOLUTION

Petty cash book [Page 13]

Receipt	Folio	Date 2015	Details	Voucher number	Total	Motor expenses	Staff travelling	Postage	Cleaning expense	Ledger folio	Ledger accounts
$		Nov.			$	$	$	$	$		$
1200	CB 29	1	Cash								
		2	Petrol	1	126	126					
		3	K. Sherman	2	64		64				
		3	Postage	3	48			48			
		4	D. Chambers	4	42		42				
		7	Cleaning	5	30				30		
		9	Petrol	6	38	38					
		12	K. Lyn Cooke	7	60		60				
		14	Petrol	8	70	70					
		15	L. Williams	9	100					SL 12	100
		16	Cleaning	10	30				30		
		18	Petrol	11	48	48					
		20	Postage	12	56			56			
		22	Cleaning	13	38				38		
		24	H. Mulling	14	150		150				
		27	K. Young	15	66					PL 81	66
		29	Postage	16	44			44			
		30	Balance b/d		1010	282	316	148	98		166
1200					190	GL 71	GL 92	GL 44			
					1200						
190		Dec1	Bal b/d								
1010	CB 30	Dec1	Cash								

Double entry for each item:

Cash book [Page 29]

2015		Folio	$	2015		Folio	$
				Nov. 1	Petty cash	PCB 13	1 200
				Dec. 1	Petty Cash	PCB 13	1 010

General ledger – Motor expenses [Page 71]

2015		Folio	$				
Nov. 30	Petty Cash	PCB 13	282				

Staff travelling expenses [Page 92]

2015		Folio	$				
Nov. 30	Petty Cash	PCB 13	316				

Postage [Page 44]

2015		Folio	$				
Nov. 30	Petty cash	PCB 13	148				

Cleaning [Page 46]

2015		Folio	$				
Nov. 30	Petty Cash	PCB 13	98				

Purchase ledger

2015		Folio	$	2015			$
Nov. 27	Petty Cash	PCB 13	66	Nov. 1	Balance b/d		66

Sales ledger

2015		Folio	$	2015			$
Nov. 15	Petty Cash	PCB 13	100	Nov. 1	Balance b/d		100

Just a reminder:

a. Reimbursement equals the total amount spent in the month.
b. At the end of each period, add up the totals column.
c. The total of each expense column is debited to the expense account in the general ledger.

The last column in the petty cash book is a ledger column used to record items paid out of petty cash, which are to be posted to sales and purchases ledgers.

This is where we will end for this week. Join me again next week as we continue to complete the syllabus. Grasp the concepts and retain them; you will need them as you progress to excellence. See you next week.

Roxanne Wright teaches at Immaculate Academy. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

Reactions of alkanes and alkenes

FRANCINE TAYLOR-CAMPBELL
Contributor

HOW ARE ALKANES DIFFERENT FROM ALKENES?

Alkanes and alkenes are hydrocarbons obtained from the fractional distillation of crude oil. The general formula of the alkanes is $C_n H_{2n+2}$, while that of the alkenes is $C_n H_{2n}$.

Alkanes and alkenes represent two different homologous series. Hence they will undergo different chemical reactions.

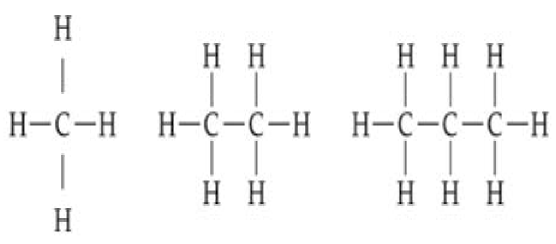
Alkanes are saturated compounds (contain single bonds) and so react by substitution. Alkenes are unsaturated (possess a double bond) and so undergo addition reactions.

Using the general formula C_nH_{2n+2}:
For n = 1, 2, 3, etc.

When n = 1; the first member is $C_1H_{(2*1)+2} = CH_4$ - Methane.

When n = 2; the second member is $C_2H_{(2*2)+2} = C_2H_6$ - Ethane.

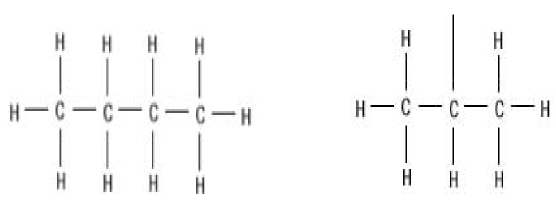
When n = 3; the third member is $C_3H_{(2*3)+2} = C_3H_8$ - Propane.



Methane Ethane Propane

The first 3 members of the alkanes homologous series.

Alkanes can form isomers, that is, substances having the same molecular formula but differing in how the atoms are arranged (structural formula). Branching in alkanes can lead to the formation of isomers. Example butane (C_4H_{10}) and 2-methyl-propane (C_4H_{10}).



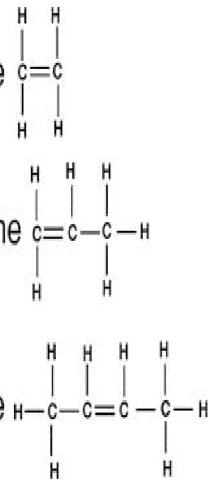
butane 2-methyl-propane

Using the formula C_nH_{2n}, alkenes form compounds with a carbon-carbon double bond (C=C). Since a double bond must be present, an alkene must have at least 2 carbon atoms, hence, the first member of the alkenes series is ethene (C_2H_6).

Ethene

Propene

Butene



Alkanes and alkenes undergo combustion reactions, where they burn in oxygen to produce carbon dioxide and water. If oxygen is limited, carbon monoxide and carbon can also be formed. Alkenes will produce a more sooty flame due to a higher proportion of carbon than alkanes.

Ethane: $2C_2H_6 + 7O_2 \rightarrow 4CO_2 + 6H_2O$
Ethene: $C_2H_4 + 3O_2 \rightarrow 2CO_2 + 2H_2O$

These reactions are exothermic and produce vast amounts of energy and explain why these hydrocarbons (from crude oil) are used as fuels.

HOW CAN AN ALKANE BE DISTINGUISHED FROM AN ALKENE?

Alkanes and alkenes can be readily distinguished using bromine water (bromine in carbon tetrachloride) and acidified potassium manganate (VII) solution. These solutions are quickly decolourised when alkenes are added but show no change in colour when alkanes are tested.

Alkanes and alkenes also differ in the reaction type that they undergo. Alkanes can only undergo SUBSTITUTION reactions (where one atom is replaced by another) as they are already saturated compounds. Alkanes react with halogens (group 7) in the presence of light/ UV radiation. Example: $CH_4 + Br_2 \rightarrow CH_3Br + HBr$ (Bromomethane).

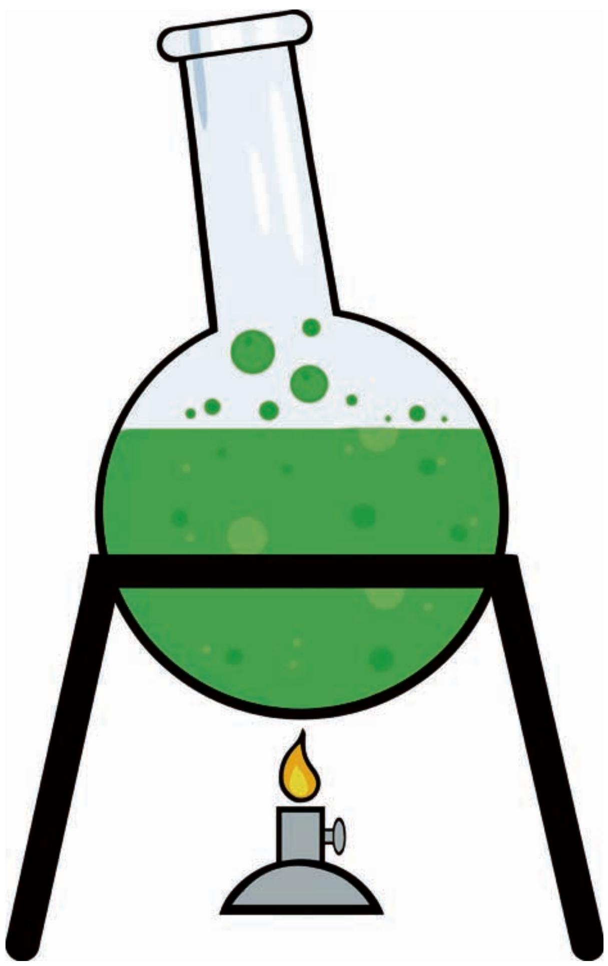
Alkenes undergo ADDITION reactions, where an atom or molecule is added across the double bond (C=C). Example: $C_2H_4 + Br_2 \rightarrow C_2H_4Br_2$ (dibromoethane).

When hydrogen (H_2) is added to an alkene (in the presence of nickel/ or platinum catalyst at 20^0 C), an alkane is formed. Example: $C_2H_4 + H_2 \rightarrow C_2H_2$. This is a hydrogenation reaction and is used industrially to produce margarines.

Addition of water (in the presence of phosphoric acid, silica at 300^0C, 60 atm) is used industrially to produce alcohol. Example: $C_2H_4 + H_2O \rightarrow C_2H_5OH$ (ethanol).

Addition of hydrogen halides (HCl, HBr, HI) to alkenes leads to the formation of haloalkanes, popularly used in aerosols etc. Eg. $C_2H_4 + HCl \rightarrow C_2H_5Cl$ (chloroethane).

Francine Taylor-Campbell is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com



Caribbean wetland environments

MONACIA WILLIAMS
Contributor

"For many of us, water simply flows from a faucet, and we think little about it beyond this point of contact. We have lost a sense of respect for the wild river, for the complex workings of a wetland, for the intricate web of life that water supports."

– Sandra Postel

HELLO AGAIN, students. How are you this week? How are you coping with the SBAs and the investigative project? I hope everything is going well and that you are managing to stay on top of the work, even as the workload seems to become heavier and heavier!

This week, we continue our study of the environment by looking at wetlands. I can just about hear you ask the question, "Wet what?" Wetlands are, as the name suggests, areas of land that are permanently wet and are defined by the Ramsar Convention on Wetlands as:

■ *Areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.*

As we continue our lesson, you should begin to realise that wetlands are areas of great environmental importance.

There are wetlands in the Caribbean that are of international importance and, hence, fall under the Ramsar Convention, which focuses on the conservation and sustainable utilisation of wetlands.

These include:

JAMAICA

■ Black River Morass.
■ Palisadoes/Port Royal.
■ Portland Bight Wetlands and Cays.
■ Mason River Bird Sanctuary.

TRINIDAD

■ Buccoo Reef/Bon Accord Lagoon.
■ Caroni Swamp, Nariva Swamp.

BARBADOS

■ Graeme Swamp

As shown on the map of Jamaica above, there are other wetland areas, but these do not fall under the Ramsar Convention. This is also the case for Barbados and Trinidad and Tobago.

The following are some of the functions of wetlands:

■ Water purification
■ Ground water storage and discharge – Recharge ground water.
■ Nutrient cycling.
■ Prevent sea water from coming inland – Prevents flooding
■ Protect the shoreline from storm surges – Slows erosion
■ Habitats for endemic species of plants and animals as well as habitats for migratory animals, especially birds.
■ Provide a breeding ground for birds and fish.
■ Reduces flood damage.
■ Protects coral reefs from sedimentation and pollution from soil from the land.

There are also economic benefits to be gained from the wetlands. These include:

■ Providing a livelihood for many – The thatch palms, which are a feature of some wetlands, are used for roofing and to make baskets.
■ Aesthetics – Serves as an eco-tourism attraction
■ Potential energy source – Black River Morass has a layer of peat.
■ Research and education.
■ Gene bank due to the diversity of plant and animal species.

It follows, then, that wetlands are areas to be preserved rather than exploited, but this is not always the case in countries like Jamaica where governments need to balance economics withe aesthetics. So, the controversy of the preservation of the Portland Bight against the development of a logistics hub will resurface again in Jamaica. The important thing for you to remember as the next generation is that once the wetland is destroyed, it cannot be regained in your lifetime!

WHAT ARE SOME FACTORS THAT LEAD TO THE POLLUTION OF THE WETLANDS?

These factors also serve to pollute the seas that most wetlands are intimately connected with. They include:

■ Untreated domestic sewage – This encourages the growth of algae (eutrophication) and bacteria, which can grow to such an extent that they prevent sunlight from getting to the corals, as well as plants below the surface of the water. They will also use up most of the available oxygen, causing corals, fish and small invertebrates to die.
■ Fertilisers which drain from farms – These create the same effects as domestic sewage.
■ Run-off from drainage ditches – Run-off brings with it soil particles, which remain suspended in the water and so decrease the amount of light reaching the corals, hence retarding their growth.
■ Industrial waste from coffee and sugar processing - These include materials that are harmful to both plants and animals. In the sugar belts, the release of effluent from sugar-cane processing often leads to fish kills.
■ Oil spills – these lead to the death of sea birds and can destroy beaches. The feathers of the birds become clogged with oil, and the birds take in the oil when they try to clean themselves. They die of exposure, starvation or drowning.

What are the life lessons that we have learnt so far? It is our duty to use our God-given resources wisely so that they can continue to exist to serve generations to come!

See you next week!

Monacia Williams is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

The development of the peasantry, 1838 to 1900 – Part 2

DEBBION HYMAN
Contributor

OBJECTIVES

1. Outline three factors that aided the development of the peasantry.
2. Discuss three factors that hindered the development of the peasantry.
3. Discuss the contribution of the peasantry to the social and economic life of the Caribbean.

GROWTH OF THE PEASANTRY: EFFORTS OF THE FREEMEN

1) Apart from the missionary-supported free villages, many freemen bought their own land with money earned from overtime work during apprenticeship. They became subsistence farmers but sold some surplus crops in local markets and, in some cases, grew sugar cane. They eventually developed trading systems ('higgling' in Jamaica) and exported crops (coffee, ginger and pimento in Jamaica; arrowroot in St Vincent; cocoa and copra in Grenada).

2) Metayage or sharecropping – Labourers produced the sugar, and profits were shared between themselves and the plantation owners. This was done mainly in the French islands, St Lucia, and Tobago. In Barbados and other areas, the freemen grew sugar cane on plantation grounds or small plots nearby; the cane was milled on the estate, and estate owners and growers shared profits.

3) The cooperative venture in Guiana was short-lived, but, after its collapse, cooperative members still sought land by squatting in the interior.

4) Squatting – Illegal occupation of Crown Lands in remote areas. This was common in large territories.

HINDRANCES

The peasants encountered such difficulties as:

1. Exploitation of land buyers; they were forced to pay excessively high prices for inferior land.
2. Laws were passed restricting the movement of labourers both within a particular colony and among the various Caribbean islands.
3. Blacks having to pay for costly licences to sell sugar and coffee and for making charcoal
4. Colonial governments imposed restrictions on the sale of Crown lands.
5. The land itself was very often marginal, infertile and remote.
6. Licences for the sale of export crops were required.

ROLE PLAYED BY GOVERNMENT IN FACILITATING THE DEVELOPMENT OF THE PEASANTRY

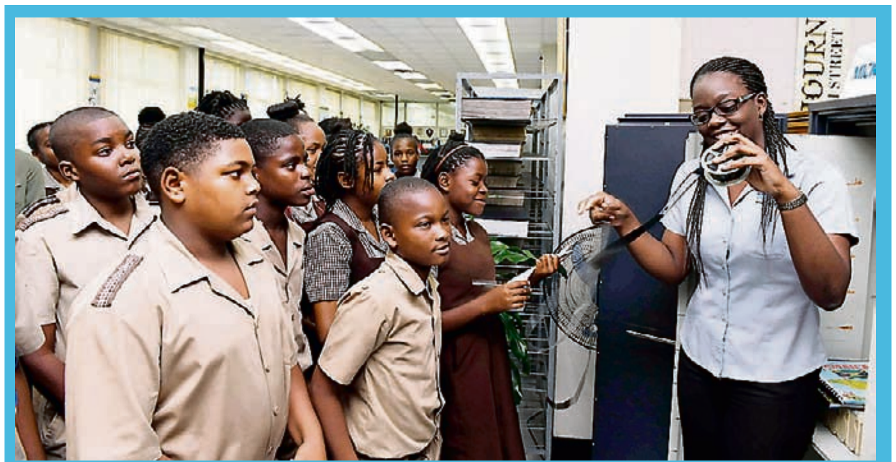
1. In the 1860s, the colonial office began to encourage local governments to allow black farmers to acquire land in Trinidad. Sir Arthur Gordon took the lead in 1868 by beginning the sale of Crown Land to freemen at low prices. In British Guiana, the price of land was reduced so more blacks were able to acquire land. In other colonies, farmers were encouraged to buy wasteland from uncultivated plantations. In Grenada, sugar cultivation was abandoned, so the number of small farmers increased by 1910. In Jamaica, the number of small farmers doubled in the period 1860-1910. In St Vincent, abandoned estates were given to arrowroot farmers. This was the colonial government's efforts to provide land to farmers through a land settlement scheme.

2. The price of land was reduced to encourage small farmers to purchase land for the cultivation of new export crops.

3. The Imperial Department of Agriculture suggested suitable crops to be grown in the different islands. It also aimed to introduce new crops in areas where sugar was not the ideal crop.

New Crops	Territories
1. Bananas	Jamaica
2. Sea Island Cotton	Montserrat, St Vincent
3. Rice	British Guiana
4. Cocoa	Trinidad, Grenada, St Lucia, Dominica
5. Arrowroot	St Vincent
6. Rubber	Trinidad, British Guiana
7. Limes	Dominica, St Lucia
8. Coconuts	Trinidad, Nevis

EFFECTS OF THE SUCCESSFUL ESTABLISHMENT OF MARKETS FOR NEW CROPS



NORMAN GRINDLEY/CHIEF PHOTO EDITOR

Sheree Rhoden, information systems manager, Gleaner Company (Media) Limited, gave some lessons to students of Black River High School, during a tour of the newspaper plant on Friday, March 23, 2018.

1) The peasant farmer class grew in number and importance as sugar plantation agriculture declined, so peasant production became vital to the economies of many territories, particularly in the Lesser Antilles.

2) Peasant farmers were able to improve their standard of living from the income earned from the sale of new crops.

3) The establishment of banks encouraged small farmers to save money earned from the sale of crops. Perhaps, later this money was used to buy new equipment or more land.

In conclusion, the peasants started producing some of their crops for export. They grew ginger, pimento and coffee, which were sold to local brokers who supplied European brokers. The small farmers in the Leewards grew arrowroot as a staple export crop. In Grenada, they exported coffee, cotton, cocoa, copra, honey and beeswax. In Trinidad, as the squatters cleared the land, they sold the timber for charcoal burning and exported some for boat building. Later, they planted and exported coffee and cocoa. The new farmers, small traders, craftsmen and shopkeepers, and women who ran lodging houses laid the foundation for a new pattern of social and economic life in the Caribbean. In Jamaica, this could be seen by the middle of the nineteenth century.

Inland towns, villages, schools and health facilities grew up as a result of the peasantry. Shopkeepers, tailors, shoemakers and blacksmiths settled inland to supply goods and services to the surrounding farmers. A system of tracks and pathways developed to link the interior towns and villages with each other and to the coast. Along with this came the higglers and wholesalers to buy fresh fruits, vegetables, cocoa, coffee, pimento, arrowroot and ginger. Goods for sale were taken to the coastal towns to be prepared and shipped by a new group of merchants. A two-way trade developed, where they sold the farmers' produce to Europe and imported manufactured goods and provisions, which they sold to the new village shopkeepers. A system was built that was separate from the plantation; the new merchants gave the coastal towns a new importance.

ACTIVITY – EXTENDED WRITING

Imagine that you are a peasant living in Trinidad in the 1890s. Prepare a speech for the local assembly in which you:

i. Outline three factors that aided the development of the peasantry. [9marks]

ii. Describe three hindrances faced by peasants. [9 marks]

iii. Outline four effects of the peasantry on British Caribbean economy and society. [7 marks]

Total 25 marks

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Looking for work?

MAUREEN CAMPBELL
Contributor

"We may seem great in an employment below our worth, but we very often look little in one that is too big for us."
– François de La Rocherfoucauld

EMPLOYMENT MAY be defined as an agreement involving an employer and an employee. The employee is expected to provide certain services on the job, and the employer ensures that this is carried out in a workplace. The aim is to facilitate the achievement of the employer organisation's goals and mission – In return the employee will receive payment.

The stability of any economy rests on the ability to maintain a low unemployment rate and, to provide a safe, secure working environment. When a good relationship exists between individuals and their working environment, society benefits as well.

TERMS YOU SHOULD KNOW

Unemployable: If an individual is unemployable, it simply means that he is not able or likely to get paid employment. This may be because he lacks the necessary skills or the qualifications needed for the position.

Underemployment: This occurs when an individual is only working part time when he is qualified for full-time employment; He is therefore, unable to make full use of his skills

Self-employment: This is a situation where an individual works for himself or herself instead of working for an employer who pays a salary or a wage.

Unemployment: This is a situation where an individual in an economy is willing and able to work but is unable to find work.

FACTORS THAT INFLUENCE EMPLOYMENT, UNEMPLOYMENT, AND UNDEREMPLOYMENT

TYPES OF UNEMPLOYMENT

VOLUNTARY

At a very basic level, unemployment can be broken down into voluntary unemployment due to people willingly leaving previous jobs and now looking for new ones.

INVOLUNTARY

This is unemployment which is due to people getting laid off or fired from their previous jobs and needing to find work elsewhere.

FRICTIONAL UNEMPLOYMENT

There are jobs available, but the unemployed does not have the skills to match the jobs, Self-employed is a situation in which an individual works for himself instead of working for an employer that pays a salary or a wage. A self-employed individual earns his income through conducting profitable operations from a trade or business that he operates directly.

CYCLICAL UNEMPLOYMENT

The term cyclical unemployment is used to describe unemployment that is associated with business cycles occurring in an economy. Cyclical unemployment occurs mostly during recessions when demand for goods and services in an economy falls. In many cases, companies respond by cutting production and laying off workers rather than by reducing wages and prices.

STRUCTURAL UNEMPLOYMENT

Structural unemployment can be due to an improvement in technology. It may also occur because labour markets in most countries have more workers than there are jobs available, and employees are not willing for their wages to be cut in order to bring the markets into equilibrium. Structural unemployment may also result when workers possess skills that are not in high demand and they lack skills that are in high demand.

SEASONAL UNEMPLOYMENT

Seasonal unemployment can be thought of as a form of structural unemployment. This may be so as the skills of seasonal employees are not needed in certain labour markets for some parts of the year. Some workers have jobs at certain times of the year.

BENEFITS OF UNEMPLOYMENT

■ The unemployed can do extra training or pursue hobbies.
■ These individuals may take part in retraining to enhance their skills.

COSTS OF UNEMPLOYMENT

■ The unemployed do not have the economic means to enjoy good quality of life.
■ The unemployed may become depressed and discontented.
■ Individuals may lose skills due to lack of practice.
■ Unemployment means that the society is not using all its resources.

MEASURES TO REDUCE UNEMPLOYMENT

■ Retraining programmes: This will help people to be more employable.
■ Government projects to improve job availability.
■ More advertising: Increases the chances of those seeking jobs.
■ Teach more hands-on practical subjects in school.

SELF-EMPLOYMENT

Being self-employed is a situation in which an individual works for himself instead of working for an employer who pays a salary or a wage. A self-employed individual earns his income through conducting profitable operations from a trade or business that he operates directly. Self-employment can give you financial rewards and independence from employers.

ADVANTAGES OF SELF-EMPLOYMENT

■ Self-employment gives an individual the freedom to do what he loves to do.
■ Most of all he is free to choose whom he wants to work.
■ You will be able to make your own decisions about your work and no one will be able to question your decisions.
■ You cannot get fired as you have total control over your career and job.
■ You can have your vacation, as you do not need to get permission from anyone. Just ensure that you organise your work completely so that it is accomplished.
■ It should boost your confidence and bring out your creativity and potential.
■ You can work whenever you want to and choose your own workplace and conditions.

DISADVANTAGES OF SELF EMPLOYMENT:

■ Work hours of the self-employed may get consistently longer with unpredictable income.
■ The relationship between the self-employed and the clients plays a big role in the business. They can make or break your business.
■ The self-employed don't get paid when they are on leave. You may have to work hard to ensure the growth of the business and sacrifice all your vacations.
■ You will have to pay for your own health insurance.
■ You will have to work to build up your business reputation because no one will know about your business.
■ Self-employment brings with it much more responsibility than working under another person. You will be totally responsible for your success and or failure.

Self-employment is risky, but it is a very good choice for individuals who are able and willing to withstand risk and stress and who are determined to achieve what they want to accomplish no matter what comes in the way. Individuals wanting to become self-employed must, however, possess good entrepreneurial skills or have someone working for them with such skills. No one should simply get involved in this venture without having the basic skills and knowledge of its advantages and disadvantages.

ACTIVITY

1. Suggest three reasons why it is important to be employed. Explain your answer.
2. Differentiate between employment, unemployment, and underemployment.
3. In your country, outline three reasons for unemployment, and suggest what your government could do to solve each issue.

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Argumentative essay writing

MELISSA MCKENZIE
Contributor

STUDENTS, IN this week's lesson, we will begin our focus on Section D of the English A paper. The format for your response may change from year to year, which means that you can get a speech, a letter to the editor, or an argumentative essay. The length of your essay should be 250-300 words, and you will get 40 minutes to write it.

Please note that you will only be getting one question in this section, therefore, it is very important for you to have knowledge of a wide range of topics or issues. You are encouraged to read the newspaper, watch the news, listen to the radio, and browse the Internet so that you can keep current. You do not know which topic will form the stimulus, so the more you know, the better.

According to the English A syllabus, this section will assess your ability "to communicate personal opinion clearly and cogently in language which effectively persuades or dissuades'". It is, therefore, important for you to engage in meaningful discussion and use the relevant persuasive techniques to enhance your information. We all have opinions, but we must be able to communicate them effectively.

As a reminder, here is a list of some key persuasive techniques:

- Rhetorical question
- Repetition
- Quotes
- Evidence/statistics/facts
- Repetition
- Expert/reliable source
- Anecdotes
- Analogy

As long as these persuasive techniques are incorporated strategically in your written response, you will be awarded superior marks.

Now, let's explore the parts of the argumentative essay. In other lessons, we will focus on the letter to the editor and speech writing.

WHAT IS THE ARGUMENTATIVE ESSAY?

This essay provides the writer's position on a particular topic. This position is usually taken on a controversial issue and requires the writer to present sound arguments in support of his position.

In the English A examination, you may be asked to write an argumentative essay on topics or issues like:

- Global warming
- Social media
- Free healthcare
- Free education
- Cellular phones in schools
- Corporal punishment
- Capital punishment
- Parenting
- School rules
- Privacy for teenagers
- Vigilante justice
- The impact of technology
- Physical education
- CARICOM

As I stated earlier, please get to know as much as you can about a range of topics or issues. Also, pay attention to what is trending. You never know what you will be asked to do.

PARTS OF THE ARGUMENTATIVE ESSAY

Since you are expected to write between 250 and 300 words, it is recommended that you use the five-paragraph essay format. Below, I have provided an outline of this format.

INTRODUCTION

The introduction is the first paragraph. Here, the reader gains a general understanding of what stance has been taken and its supporting points. It has:

- An opening statement/hook, which is usually in the form of an attention grabber such as a definition, a proverb, quote or rhetorical question;
- A thesis statement (a declaration of the position to be taken – whether you agree or disagree with the topic to be discussed);
- A summary of supporting points. This includes briefly mentioning the points that will be elaborated on.

EXAMPLE OF AN INTRODUCTION

Every year during the Easter season, carnival revellers are seen on the street gyrating their sweaty, barely covered bodies. (Opening statements) This should not be. Carnival is a waste of time and money for varying reasons. (Thesis) One, it exposes children to sexually suggestive moves; two, it causes people to spend money they need, and three, it encourages promiscuity. (Summary of supporting points)

BODY

- The body of the essay is where EACH of the supporting points is developed and discussed in a separate paragraph. In other words, more information is offered in the form of explanations, examples, statistics, or quotes.
- The body should provide counterarguments. This is where you anticipate objections to your points, but you counter them.
- The body is also held together by the use of transitional words. Here are some basic examples: first, second, third. Each paragraph in the body begins with what is called a TOPIC SENTENCE. This sentence indicates the point that will be elaborated on in that specific paragraph. Note the example below. The topic sentence is underlined.

<u>Firstly during carnival, people spend money that they need.</u> This event can be quite expensive as costumes, clothes, and liquor are up for sale. In addition, there are different parties that have to be attended. While some people may say that carnival is an activity that is saved for, research shows that 60 per cent of the participants do not and are quite impulsive in their spending habits during the carnival season. People usually indulge in what this event has to offer and use money they might need for their household expenses or for their children's education. When the fun stops, these persons will have to face these bills – without the money.

CONCLUSION

- The conclusion brings the essay to a close by restating the stance and the supporting points in a fresh way. It serves as reinforcement of the argument that has been presented.

Example: *In conclusion, an activity such as carnival, that facilitates casual sex, the wasting of much-needed money, and the exposure of children to sexually explicit dances is unnecessary. The society is already challenged by other forms of immorality and one less is one step closer to a better life.*

Here are some essay topics that have come on the English A exam in previous years.

1. Using drugs is fine as long as it is done in the privacy of one's home.
2. Homework should be removed from the school system.
3. Bullies have no place in the school system. They should be placed in special institutions.
4. Dancehall music is to be blamed for the indiscipline among students.
5. Individuals who refuse to evacuate during a natural disaster should be fined.

You are usually asked to agree or disagree with or express your views on the given topic.

Remember, as you prepare for the topic that may come in Section C, do more to know more.

Take care.

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'Berry'

BERYL CLARKE
Contributor

Anyway tonight, she was not bound on a frivolous errand toward the doctor's cottage.

WOW! WHAT did the writer just tell us about Mrs Osborn? Think about it, please. Berry has made a favourable impression on her, and that she refers to him as 'boy' does not say that she is prejudiced against him because of his race. She did the same in thinking about the Scandinavian worker. I want you to remember her attitude to Berry now, as opposed to later, when Berry is unfairly treated and dismissed.

Last week, we paused after Mrs Osborn's visit to the doctor's cottage. As she walks back to her building, she focuses on the doctor. When he visits the home at eight that evening, Dr Renfield speaks to her, finds out her reason for visiting his home, and deals quickly with the situation. Although he does not say anything to encourage her infatuation, notice how he stares into her eyes as if there is an understanding between them. What do you think of the repetition of "... left her. Left her. Left her"? Who is thinking this? I'd agree with you if you said Mrs Osborn, for she likes her employer very much.

Mrs Osborn does not treat the other employees with the respect that she gives the doctor, and there is the suggestion that her attitude to them comes from her sense of superiority. Berry was put at a disadvantage by the way she added other duties to those for which he was already being underpaid. Perhaps the other workers, including the nurses, took their cue from her as they came to expect help/assistence from him. Read again the part of the story which tells us how he is drawn into helping the nurses and how much he does. Not surprisingly, Mrs Osborn changes her tune in regard to him after the incident. No one would expect her to voice an opposing opinion to that which the doctor holds and expresses. While his racism explodes on the occasion, Mrs Osborn does not take his side because she despises Berry, but because she would do anything to be please Dr Renfield and be in his good books.

Justine-Renae Jarrett (seated foreground), marketing intern at JN Bank, assists Joy-Ann Facey (seated left) and Britanya Wilson, students of the St Elizabeth Technical High School, to open savings accounts with JN Bank under the JN School Savers' programme.

Let us now spend some time with Berry. We are introduced to him as a *'... nice black boy, big, good natured and strong – like what Paul Robeson must have been at twenty.'* He had suffered from hunger as it had been hard for him to get a job. Berry is uneducated but has common sense and can see that something is not right at his workplace. He is no fool and realises that he is being discriminated against.

"The grown-up white folks only spoke to him when they had some job for him to do, or when they were kidding him about being dark, and talking flat and southern, and mispronouncing words."

He accepts their ways, for he thinks that most white people are naturally not good and do not treat him well, even though he has done nothing bad to them. He realises, too, that he is doing too much work for the pay he is receiving. That is, as he puts it *"... everybody was imposing on him in the taking for granted way white folks do with negro help."* He dislikes the dishonesty he sees around him. Yes, his days are long, and work is piled on him, but he never complains for he needs to eat and live somewhere and, most of all, his concern for the children makes him accept the conditions and remain.

It is obvious that Berry recognises a similarity between the children and himself. They face prejudice and are handicapped by their circumstances; theirs are physical, his is his race. The children accept him as just another human being, and he loves them. He helps them to move about and entertains them with songs and stories. This young man is creative enough to be able to make up stories for the children. He is able, too, to feel sympathy for the children in spite of his own situation.

I want ask you a question. What do you think about the way the story ends? Examine it in your study groups. I hope that you will have some lively arguments about how **Berry** ends. Is it unexpected, or not? Disappointing, or not? A review of the attitude of the ones with power in the story should have prepared you for their behaviour. What I believe most, if not all of us, would have preferred is an ending where Berry is shown appreciation for his hard work and unselfish behaviour. Perhaps we would even have liked to see Dr Renfield being exposed for his dishonesty, but, as this bit of literature is a reflection of life and not a fairy tale, we should not have expected anything different. So, yes, we are disappointed as Berry loses not only his job but his week's pay because he lives in an unjust society.

There are some terms in our story with which I would like you to familiarise yourselves. While Mrs Osborn uses the word 'negro', her employer does not, preferring the offensive use of 'nigger' and 'darkie'. Such usage reveals his racial bias. We have also *'mother wit', 'gyp game', 'pines and scrub' and 'nose glasses'.* Do you know who Paul Robeson was? He was a successful black singer and actor and I wonder if he is mentioned here to put Milberry in a positive light.

Discrimination takes all forms, so try to be careful how you treat others. God bless!

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Relational operators and truth tables

NATALEE A. JOHNSON
Contributor

GOOD DAY, students. This is lesson 25 in our series of lessons. In this week's lesson, we will be looking at relational, arithmetic and logical operators, as well as truth tables.

The relational operators are used for comparison of the value of one element with another. There are six types of relational operations: equal, greater than, less than, greater than or equal to, less than or equal to, and not equal to. Each of these operations can be used to compare the values of the variables. The result of each of these operators is either true or false. When using these operators, make sure all the arguments are the same data type. Integers should be compared with integers, strings with strings, and so on. Table 1 reviews each of these operators.

TABLE 1 – RELATIONAL OPERATORS

Operator Name	Symbol	Description
Equal	=	Returns true if both sides are **equal.**
Greater than	>	Returns true if the variable on the left is **greater** than the variable on the right.
Less than	<	Returns true if the variable on the left is **less** than the variable on the right.
Greater than or equal to	>=	Returns true if the variable on the left is **greater than or equal to** the value of the variable on the right.
Less than or equal to	<=	Returns true if the variable on the left is **less than or equal to** the value of the variable on the right.
Not equal to	<>	Returns true if both sides are **not equal.**

Let us look at an example.

Table 2 shows a truth table with examples for each of the relational operators. As the table shows, A is set to 60 and B is set to 30. When we check equally with the equal operator, both sides must be equal or same for the expression to be true. Because the 60 is not equal to 30, the A = B is false. In this case, the expression is true because 60 is greater than 30. Using similar logic, the table shows results for other relational operators.

TABLE 2 – TRUTH TABLE FOR RELATIONAL OPERATORS

Operators Symbol	Example (Assume A = 60, B = 30)	True when	False when	Result
=	A = B	A and B are same or equal	A and B are different	False
>	A > B	A is greater than B	A is not greater than B	True
<	A < B	A is less than B	A is not less than B	False
>=	A >= B	A is greater than or equal to B	B is greater than A	True
<=	A <= B	A is less than or equal to B	B is less than A	False
<>	A <> B	A is not equal to B	A and B are same or equal	True

BOOLEAN OPERATORS AND TRUTH TABLES

A truth table shows the output states for every possible combination of input states. The symbols 0 (false) and 1 (true) are usually used in truth tables. There are three main logical operators that we will concentrate on for the CSEC level, and they are: AND, OR and NOT. For every logical operator, we are going to be examining its corresponding truth table.

THE 'AND' OPERATOR

For the 'AND' operator the output Q is true if input A and input B are both true: Q = A and B

TRUTH TABLE

Input A	Input B	Output Q
0	0	0
0	1	0
1	0	0
1	1	1

THE 'OR' OPERATOR

For the 'OR' operator the output Q is true if input A or input B is true (or both of them are true): Q = A or B

TRUTH TABLE

Input A	Input B	Output Q
0	0	0
0	1	1
1	0	1
1	1	1

THE 'NOT' OPERATOR

The output Q is true when the input A is NOT true. The output is the inverse of the input: Q = NOT A

A 'NOT' can only have one input.

TRUTH TABLE

Input A	Output Q
0	1
1	0

THE ARITHMETIC OPERATORS

You are more accustomed to using these operators in your daily life. Please see table below:

Operator	Purpose
+	Use for adding values, for example 2 + 3
-	Use for subtracting values, for example 2 – 3
*	Use to multiple values, for example 2 * 3
/	Use for dividing values of which a remainder could be ascertain or for real numbers, for example 5/4 = 1.25
Div	Division of integers of which a remainder is not given, for example 10 div 2 = 5
%	the modulus (mod) operator '%' is used for the division of numbers where only the remainder is recorded, for example, 12 % 5 = 2

You may not have come across the modulus operator before. It just calculates the remainder after dividing the value of the expression on the left of the operator by the value of the expression on the right. For this reason, it's sometimes referred to as the remainder operator.

We have come to the end of this lesson. See you next week, when we will look at modularity/top-down design to end this unit. Remember, if you fail to prepare, you prepare to fail.

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CLEMENT RADCLIFFE
Contributor

Vectors

AT THE outset, let us review the homework given last week.

HOMEWORK

1. The diagram shows vector b and vector c. Express in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

(i) b (ii) c (iii) c + b (iv) 2b - c

SOLUTION

(i) b = $\begin{pmatrix} 2 \\ -1 \end{pmatrix}$ (ii) c = $\begin{pmatrix} -5 \\ 3 \end{pmatrix}$

(iii) b+ c = $\begin{pmatrix} 2 \\ -1 \end{pmatrix} + \begin{pmatrix} -5 \\ 3 \end{pmatrix} = \begin{pmatrix} -3 \\ 2 \end{pmatrix}$

(iv) 2 b - c = $2\begin{pmatrix} 2 \\ -1 \end{pmatrix} - \begin{pmatrix} -5 \\ 3 \end{pmatrix} = \begin{pmatrix} 4 - -5 \\ -2 \ - 3 \end{pmatrix} = \begin{pmatrix} 9 \\ -5 \end{pmatrix}$

2. Given the points A(- 5 , 2) and B(4 , 3),

■ Plot both points on a Cartesian Diagram using a suitable scale.

■ Write OA and OB as a column vectors in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

■ Find the x and y components of the vector AB.

■ Write AB as a column vector in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

SOLUTION

From the figure, OA = $\begin{pmatrix} -5 \\ 2 \end{pmatrix}$ and OB = $\begin{pmatrix} 4 \\ 3 \end{pmatrix}$

The components of AB are x = 9 and y = 1

The vector AB = $\begin{pmatrix} 9 \\ 1 \end{pmatrix}$

We will now continue vectors by reviewing LENGTH OF a VECTOR.

LENGTH OF VECTOR ON CARTESIAN DIAGRAM

The vector AB = $\begin{pmatrix} 8 \\ 6 \end{pmatrix}$ may be illustrated on the CARTESIAN DIAGRAM.

As ACB is a right-angled triangle, then using Pythagoras' Theorem

AB2 = AB2+CB2

AB2 = 82+62 = 64 + 36

AB = √100 =10

It follows that for AB = $\begin{pmatrix} x \\ y \end{pmatrix}$,

then the length of AB2 = x2 + y2

While the aspects of vectors presented above are relatively simple, the points noted are sometimes missed by students to their detriment. Please review and note them well.

PRACTICE EXAMPLES

A and B are points such that OA = a and OB = b. The point P (not shown) is such that OP = ½ a + b,

(i) Write OP in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

(ii) Determine the length of OP.

SOLUTION

(i) From the diagram, the coordinates of A = (6, 8) and B = (5, 11).

It was illustrated in last week's lesson that if the coordinates of A is (6, 8), then the position vector OA = $\begin{pmatrix} 6 \\ 8 \end{pmatrix}$

position vectors a = $\begin{pmatrix} 6 \\ 8 \end{pmatrix}$ and b = $\begin{pmatrix} 5 \\ 11 \end{pmatrix}$

Since OP = 1/2 a + b

then $\frac{1}{2}\begin{pmatrix} 6 \\ 8 \end{pmatrix} + \begin{pmatrix} 5 \\ 11 \end{pmatrix} = \begin{pmatrix} 3 \\ 4 \end{pmatrix} + \begin{pmatrix} 5 \\ 11 \end{pmatrix} = \begin{pmatrix} 8 \\ 15 \end{pmatrix}$

OP = $\begin{pmatrix} 8 \\ 15 \end{pmatrix}$

I do hope that you realise that the coordinates of the point P are (8, 15).

(ii) Using the formula for length-:

$OP^2 = x^2 + y^2$ [Using Pythagoras' Theorem]

$= 8^2 + 15^2 = 64 + 225 = 289$

length of OP = √289 = 17

I expect that you had no difficulty in understanding the above. If this is the case, let us attempt another example.

EXAMPLE

(i) Express each of the position vectors OA and OB in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

(ii) Determine the vectors:

(a) 3 OA , (b) - 2OB (c) AB hence determine

(d) 3OA - 2OB

(iii) If OA + OB = | c | , show that c = √34

The coordinates of A and B, respectively, are (3, 4) and (2, -1).

the position vectors are OA = $\begin{pmatrix} 3 \\ 4 \end{pmatrix}$ and OB $\begin{pmatrix} 2 \\ -1 \end{pmatrix}$

Note that the coordinates of A and B were used to determine the position vectors OA and OB. You could also have read off the components directly from the graph. In this case, joining OA and OB should make it easier.

(ii) (a) Given that OA = $\begin{pmatrix} 3 \\ 4 \end{pmatrix}$ then 3 OA = $\begin{pmatrix} 9 \\ 12 \end{pmatrix}$

Answer is $\begin{pmatrix} 9 \\ 12 \end{pmatrix}$

(b) Given that OB = $\begin{pmatrix} 2 \\ -1 \end{pmatrix}$ then -2OB = $\begin{pmatrix} -4 \\ 2 \end{pmatrix}$

Answer is $\begin{pmatrix} -4 \\ 2 \end{pmatrix}$

(c) AB = OB - OA = $\begin{pmatrix} 2 \\ -1 \end{pmatrix} - \begin{pmatrix} 3 \\ 4 \end{pmatrix} = \begin{pmatrix} -1 \\ -5 \end{pmatrix}$

(c) 3OA - 2OB = $\begin{pmatrix} 9 \\ 12 \end{pmatrix} + \begin{pmatrix} -4 \\ 2 \end{pmatrix} = \begin{pmatrix} 5 \\ 14 \end{pmatrix}$

Answer is $\begin{pmatrix} 5 \\ 14 \end{pmatrix}$

■ The hence in the question indicates that the answers in (a) and (b) should be used to solve the part (c). While other methods may be used, the method you are directed to use is usually the simplest approach. Always obey the instructions.

■ A common error is to subtract the two vectors found above instead of adding. This is justified as follows:

3OA - 2OB = 3OA + (- 2OB)

Since you were requested to find Vectors (3OA) and (- 2OB) you, therefore, add both answers.

(ii) Since OA + OB = c

c = $\begin{pmatrix} 3 \\ 4 \end{pmatrix} + \begin{pmatrix} 2 \\ -1 \end{pmatrix} = \begin{pmatrix} 5 \\ 3 \end{pmatrix}$

As | c | is the length of vector c ,

then | c |= $\sqrt{5^2 + 3^2}$ = √(25 + 9) = √34

Answer : √34

HOMEWORK

1.Given the points on the Cartesian Diagram, S(- 4, 3) & R(6 , 2). Write in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

a) OR b) OS c) SR d) | OS| e) RS

2. The position vectors of the points A & B relative to the origin O, are $\begin{pmatrix} -2 \\ 4 \end{pmatrix}$ & $\begin{pmatrix} 3 \\ 5 \end{pmatrix}$

respectively. Express vectors OA & AB in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

3. The points O(0 , 0), A(2 , 4) and B(8 , 2) are plotted on a Cartesian Diagram. The line segments joining O to A and B are drawn. Write each of the following in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

a) OA b) OB c) AB d) BA

I wish you a productive week as you continue to review vectors. Next week, we will begin the review of matrices.

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Guidelines for writing Module One Essay

TRUDI MORRISON REID
Contributor

LAST WEEK, we looked at a Module 1 question. As you work through your responses, pay keen attention to the following guidelines for writing the Module 1 Essay as borrowed from https://www.scribd.com/doc/50286539/Guidelines-for-Module-One-Essay-Cape-Communication-Studies.

Every year, the CXC report continues to lament the fact that students do badly on this essay. This happens because students either write insufficient information on the effectiveness of the devices, or they are confused between the writer's main point and the writer's purpose.

Here are some tips for distinguishing the main point/main idea and the writer's purpose/intention/intent:

Remember that the main point/idea is what the writer is writing about, the idea that is coming out from what you are reading. If you were asked what the piece was about, whatever you respond should be the main idea. The main idea/point is never a verb so it can never be stated like this: "The main point/idea of this passage is to inform ..." If you have done this, then your answer will be incorrect. Always remember the main point/idea is never to do something. Rather it is stated like this: "The main point/idea of the piece is that students have problems answering the Module One Essay ..."

On the other hand, the writer's purpose/intent is always stated as a verb! It is what the writer wants to happen as a result of your reading the piece. So the writer wants to "inform the reader of...", "to entertain the reader ...", "to criticise ..." "To argue that ..." , "To convince readers that ..." Remember that all writers write with a purpose/intent in mind, which is mainly to shift the readers from point A to point B! If you understand and can identify these two different concepts, you are on your way to satisfying one-third of the essay requirements. The next two-thirds are correctly identifying the language strategies/techniques/devices that the writer employed to help her achieve the main point/idea and the purpose/intent.

Tone is the attitude of the author towards the topic, that he/she is writing. One easy way of understanding tone is to ask, "What attitude did I get from reading the author's words?" Always use adjectives to describe tone (for example, humorous, mysterious, creepy, straight-forward, etcetera).

Some of the techniques that the writer employs are simile, metaphor, personification, alliteration, imagery, rhetorical question, conversational tone, anecdote, historical data, statistical data, repetition, and humour.

Jamaica's 4x100 metres women's winning team at the 2013 Penn Relays at University of Pennsylvania, Franklin Field, Philadelphia in the United States.

Once you have identified a technique, you need to discuss its use. You must write about the effectiveness of the device. In other words what is this device adding to the piece? How does it appeal to the senses and, therefore, to your understanding, and most importantly how is it aiding the author to achieve the purpose and expand the main point? Effectiveness can also be measured by asking "Do the strategies chosen by the author match his/her purpose?"

For example, when a writer uses historical data its effectiveness is to lend credibility to what is being said as a reader can easily check the records.

Conversational tone (found in anecdote and use of personal pronouns), on the other hand, allows for the reader to be drawn into the piece as one feels that the writer is striving to make one comfortable with the piece.

The challenge is not to define the devices, but to identify appropriate examples (use quotation marks) from the passage to support and then say how they add or why you believe that the writer used them.

As with every essay, one must have proper organisation. There must be an opening, a body for the content, and a conclusion, where no new ideas must be introduced. The correct use of transitional words will enhance your essay. Refrain from making your essay read like a list of devices. For example, do not say the first, the second, etc). Do not analyse the piece by its paragraphs, but by the strategies/techniques found. Depending on the length one would do, keep in mind the word limit of the essay and keep within it.

Here are some more examples of strategies and techniques:

- ❏ Use of anecdotal responses and examples
- ❏ Rhetorical questions
- ❏ Report of factual data from websites
- ❏ Use of expert/specialist advice
- ❏ Use of step-by-step process approach
- ❏ Information from creditable sources
- ❏ Making tongue -in- cheek comments
- ❏ Changes in writer's tone
- ❏ Moving from specific to general
- ❏ Addressing the audience directly
- ❏ Use of Creole and Standard English
- ❏ Use of contrast/comparison
- ❏ Use of humour
- ❏ Analogy to emphasise the idea of for difference
- ❏ In-depth reporting of character's thoughts for better understanding
- ❏ Examples of effects
- ❏ Examples of benefits

Here are some examples of language techniques:

- ❏ Noticeable use of things like contractions in dialogue.
- ❏ Use of exclamations 'gosh!', 'hey!', 'whoa!'.
- ❏ Repetitions
- ❏ Use of simple/short sentences.
- ❏ Use of dispassionate academic language.
- ❏ Use of emotive language.

Finally, the best way to overcome this challenge is to practise writing this type of essay!

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