



education

DEPARTMENT: EDUCATION
MPUMALANGA PROVINCE

Grade 12 Education Supplement 2010

Study Tips

1. Find your study space

Everyone has their own idea about the best place to study. Find a space that works for you and stick with it.

- Do you prefer to study in silence or listen to music?
- Do you work better alone or with other people?
- Do you like to study at home or at school/uni/TAFE/library?

2. Be organised

Make sure you have all the materials you need in your study space before you start studying. Getting up to look for a pencil sharpener or ruler will break your concentration and waste your time.

3. Clear your mind

If you've got a lot on your mind take a moment to write yourself some notes about what you're thinking about before you start studying. This will help to clear your mind you focus all your thoughts on your work.

It's also a good idea to keep some spare paper next to you while you're studying so if you think of anything you need to do later you can write it down and put it out of your mind, then get on with the studying.

4. Get motivated

Think about what it will mean for you if you do well in your studies. How will it make you feel? If you keep the end result in mind it will help you stay motivated.

You might like to find a quote or an image or something that represents success for you and put it somewhere you can see it while you're studying.

5. Plan your time (and use it well)

It helps to plan when you will study and how you can make the most of your study time.

Use a calendar or a list of dates or a wall planner to keep track of exam dates and assignment due dates. Plan ahead. Space out your study time each week for the whole term/semester - don't try to cram it all in the night before!

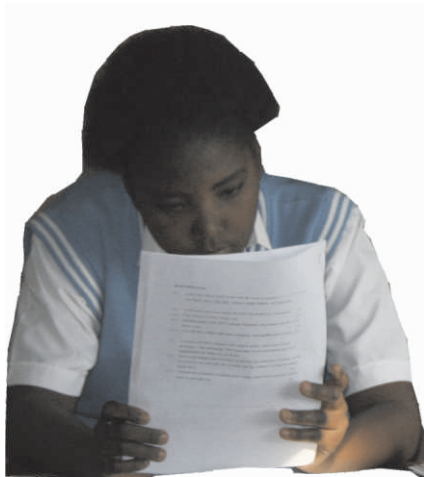
Do the hardest work when you're feeling your best. Save the easy stuff for when you're tired.

Set yourself a time limit for each task and follow it.

6. Know your learning style

Most of us have a preferred way of learning. Get to know your learning style and study in the ways you learn best.

Auditory learners learn by listening. If you're an auditory learner you could try reading your notes aloud and discussing them with other people. You might like to record key points and play them back.



Visual learners learn by seeing. If you're a visual learner you could use colours in your notes and draw diagrams to help represent key points. You could try to remember some ideas as images.

Tactile/kinesthetic learners learn by doing. If you're a tactile/kinesthetic learner you could use methods like role-playing or building models to revise key points.

Courseworks at the University of Melbourne has [a quick quiz you can take](#) (new window) to see what kind of learner you are.

7. Use your notes

Taking detailed notes in class will save you heaps of time later. Re-writing and adding to your notes is a great way to revise what you've learned.

Check out this online [Study Skills Library](#) for explanations of five note-taking systems (new window).

8. Make your own study materials

Think up some practice exam questions or create your own flash cards to help you study. This way you learn it all twice: once when you make the study materials and twice when you use them to revise.

9. Test yourself

Don't wait for an exam to test your knowledge - test yourself first. Get a friend or family member to quiz you on key concepts or offer to help other students with their work. It's a great way to get confident with what you do know and find out what you still need to learn!

10. Take time out

You study better when you're feeling good. So make sure you eat well and get enough sleep. Exercise is great but don't overdo it.

It's also a good idea to schedule regular breaks when you're studying and keep hydrated. You'll study better if you take care of yourself.

Come up with your own strategies

Remember - these tips are only some of the things that you can do to get the most out of your studying. There might be other things that work even better for you.

Ask around - find out what your friends do when they're studying - maybe some of their tricks will work for you too! Maybe your teachers have some good recommendations too.

Whatever it is, whatever strategy you come up with, when you find something that works for you, put it into practise and go for it!

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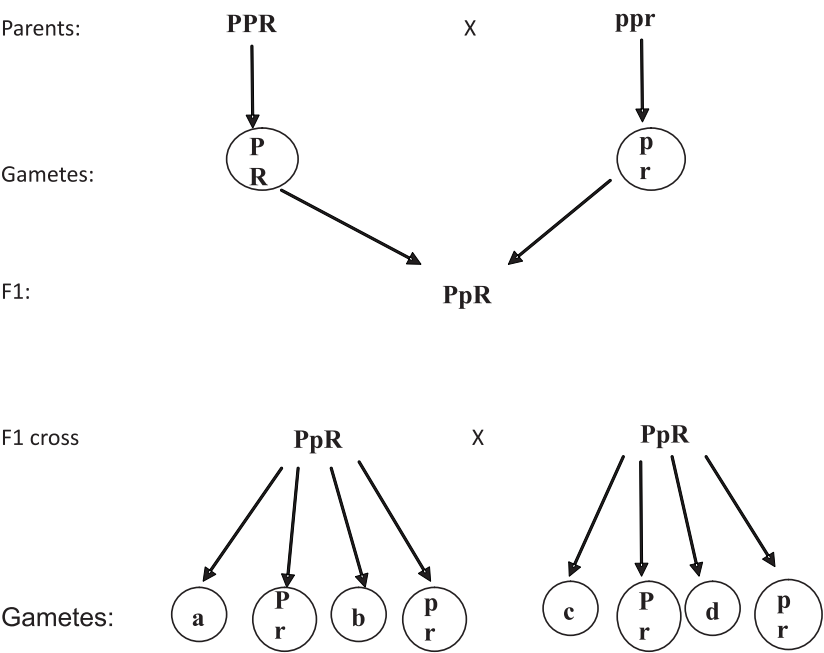


Together Educating the Nation

Agricultural Science

Topic: Basic Genetics

1. Study the table below and answer the questions associated with it.



Work out the gametes for a, b, c and d in the above dihybrid cross. (4)

2 Genetic modification of agricultural plants and animals are the latest advances in agricultural sciences. Discuss the above concepts under the following:

- 2.1 Aim of genetic modification. (3)
- 2.2 Techniques use to genetically modify organism. (4)
- 2.3 Potential benefits of genetically modified crops and animals. (4)
- 2.4 The potential risks of genetically modified crops and animals to consumers (3)

POSSIBLE SOLUTIONS

1. a – PR (✓) b – pR (✓)
c – PR (✓) d – pR (✓) (4)

2.1 The aim of genetic modification is to produce organisms with improved characteristics e.g. increased yield, resistance to adverse conditions, improved ability to survive, improved shelf life (✓✓✓).

- 2.2 - Agrobacterium tumefaciens (✓)
- Electroporation (✓)
- Micro-injection (✓)
- Gene gun (✓)

- 2.3 Potential benefits are;
- GM crops are more productive (✓)
 - GM crops have higher yields (✓)
 - GM crops are resistant to diseases and pest (✓)
 - GM crops are resistant to herbicides (✓)
 - GM crops are resistant to adverse conditions eg frost or drought (✓)
 - GM crops have longer shelf life (✓)
 - GM crops have a better flavour and nutritional value (✓)

Any four (4)

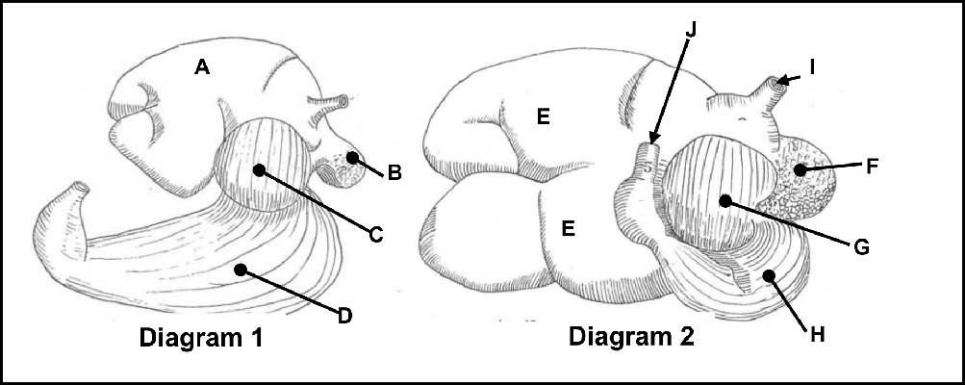
2.4 The potential risk (or disadvantages) of GM crops include;

- food safety (✓)
- environmental impact (✓)
- socio-economic concerns (✓)

(3)

QUESTION 2: ANIMAL NUTRITION

2.1 The diagrams below represent the differences between two ruminant animals from the same species at different ages. The digestive processes in each of the digestive systems differ.



- 2.1.1 Identify the digestive system of the younger ruminant. Give a reason for your answer by referring to the above diagrams. (2)
- 2.1.2 Tabulate the labels A to D in Diagram 1 and pair them with similar structures labelled E to H in Diagram 2 in the digestive systems indicated above. (4)
- 2.1.3 Name the structures labelled I and J in Diagram 2 above. (2)
- 2.1.4 From the above diagrams, indicate the part that is most suitable for the digestion of crude fibre (cellulose). Explain your answer by referring to the adaptation of this organ for the digestion of cellulose. (4)

QUESTION 2

2.1 Digestive system of ruminants

- 2.1.1 Diagram 1 ✓ and (1)
The compartments of the stomach A (rumen), B (reticulum) and C (omasum) are underdeveloped ✓
D is well developed ✓ (Any 1) (1)

2.1.2

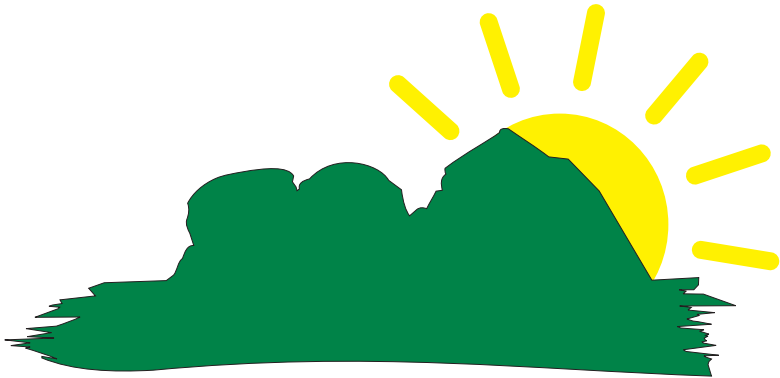
Diagram 1	Diagram 2
A	E✓
B	F✓
C	G✓
D	H✓

or paired these items

- 2.1.3 I – oesophagus / gullet / cardiac sphincter ✓
J – small intestine/duodenum / pyloric sphincter / duodenal opening✓ (2)
- 2.1.4 Diagram 2 / E / rumen / reticulo-rumen ✓ and (1)

Rumen / reticulo-rumen is well developed and large (great volume) ✓
to cater for the bulky and fibrous roughages ✓
formed like a fermentation organ or vessel ✓
and is ideal for microbe/bacteria/ protozoa activity / cellulase secretion by microbes ✓
has a warm and moist environment / correct pH / optimum pH ✓
fingerlike projections in the wall of the rumen ✓ (Any 3) (3)

[12]



MPUMALANGA
A Pioneering Spirit

Electrical Technology

QUESTION 1: TECHNOLOGY, SOCIETY AND THE ENVIRONMENT

- 1.1 The development of technology has an effect on the environment.

Name and describe TWO negative impacts that electrical technology may have on the environment. (4)
- 1.2 Designing, producing and marketing certain types of technological products require the manufacturer to exhibit entrepreneurial skills.

State THREE skills that successful entrepreneurs possess. (3)
- 1.3 Female learners and physically disabled learners should receive equal treatment in an Electrical Technology class.

Write down THREE principles that will ensure equal treatment for all the learners in an Electrical Technology class. (3)
[10]

QUESTION 2: TECHNOLOGICAL PROCESS

- 2.1 The senior citizens of Mazweni retirement village complained that the intercom system is not loud enough. The Electrical Technology learners have been asked to solve this problem.

2.1.1 Identify the problem experienced by the residents of Mazweni retirement village. (2)
- 2.1.2 Draw a flow diagram of the chosen solution. (6)
- 2.1.3 Describe any TWO specifications of the solution. (2)
[10]

QUESTION 3: OCCUPATIONAL HEALTH AND SAFETY

- 3.1 State ONE precaution that must be taken when working with a soldering iron, AND describe why this precaution must be taken. (2)
- 3.2 State ONE precaution that must be taken when using chemicals to etch a PC board AND describe why this precaution must be taken. (2)
- 3.3 Name TWO inspections that must be done before using a portable drilling machine. (2)
- 3.4 Name TWO unsafe acts that may lead to an electric shock when working in an Electrical Technology workshop. (2)
- 3.5 State TWO precautions that must be taken when using a multimeter to measure the voltage in a circuit. (2)
[10]

QUESTION 4: THREE-PHASE AC GENERATION

- 4.1 Name ONE advantage that a three-phase distribution system has over a single-phase distribution system. (1)
- 4.2 Name the type of power factor that a three-phase generator has, and explain why it has such a type of power factor. (3)
- 4.3 In a balanced three-phase delta-connected circuit, the phase voltage is 380 V and the phase current is 12 A. If the phase angle is 25°, calculate the following:

4.3.1 The true power (3)
- 4.3.2 The apparent power (3)
[10]

QUESTION 1: TECHNOLOGY, SOCIETY AND THE ENVIRONMENT

- 1.1 Air pollution caused by generation of electricity, coal emissions, etc.✓✓
Water, waste due to generation of electricity and disposable of energy devices✓✓ (4)
- 1.2 Marketing✓
Communication✓
Presentation ✓
Financial literacy
Costing of materials etc. (Any three) (3)
- 1.3 Inclusivity✓
Physical access ✓
Human rights✓
Social justice (Any three) (3)
[10]

QUESTION 2: TECHNOLOGICAL PROCESS

- 2.1.1 Poor sound quality of the radio ✓✓ (2)
- 2.1.2

INPUT✓

PROCESS✓

OUTPUT✓

Sound (waves)✓

Amplification process✓

Amplified sound waves✓

 (6)
- 2.1.3 The circuit connections and assembling should be correct✓
The amplifier should provide an audible sound to meet the needs of the elderly people.✓
Correct operation
The device circuit should be packaged in a portable way. (Any relevant answer is correct.) (2)
[10]

QUESTION 3: OCCUPATIONAL HEALTH AND SAFETY

- 3.1 Make sure a soldering stand is used to support the iron when not in use to prevent burn damage and possible fire. ✓✓ (more options) (2)
- 3.2 Make sure no physical contact is made with the chemicals. It will damage clothes and may also cause skin damage. ✓✓ (any valid answer) (2)
- 3.3 Inspect the supply cord to make sure that there are no exposed conductors which could lead to a short circuit and possible shock. Inspect the casing of the drilling machine to ensure it is earthed to give electrical and mechanical protection✓✓ (any valid answer) (2)
- 3.4 Working on a live system with exposed conductors. ✓✓
Working with portable electric equipment that is not insulated correctly. (more options) (any valid answer) (2)
- 3.5 Make surethat the meter is connected in parallel in the circuit. ✓
Make sure the lead connections are connected into the correct socket of the meter ✓ (any valid answer) (2)
[10]

QUESTION 4: THREE-PHASE AC GENERATION

- 4.1 A three-phase system is more versatile than a single-phase system as it can be connected in star or delta. ✓ (many others) (1)
- 4.2 A single-phase motor has a lagging power factor✓ as it consists of coils which are inductive. Current through an inductor connected to an AC supply lays the applied voltage ✓✓ (3)
- 4.3

V

V

I

A

I

\sqrt{I}

\sqrt{x}

A

4.3.1

P

\sqrt{V}

I

\sqrt{x}

x

x

kW

 ✓
✓
✓ (3)

4.3.2

S

P

kVA

 ✓
✓
✓ (3)
[10]



QUESTION 1: UNDERSTANDING OTHER ASPECTS OF THE MEDIA

Study TEXTS G and H and answer the set questions.

TEXT G: OPINION AND ANALYSIS

1.1 FILM REVIEW



BLOOD DIAMOND

Cast includes Leonardo DiCaprio, Jennifer Connelly and Djimon Hounsou

Two African men, one white and one black, find their lives entwined with the discovery of a rare diamond. Danny is an embittered mercenary desperate for a fresh start away from the violence. While in jail he hears about an enormous diamond that Solomon, a local fisherman and enslaved diamond worker, has stolen and hidden. Solomon also hopes the diamond will bring a brighter future for his family. Maddy is a journalist who helps the men travel through enemy territory to retrieve the diamond. It's a first-hand look at, and condemnation of, the impact illegal diamonds have in countries like Sierra Leone. Unmissable!

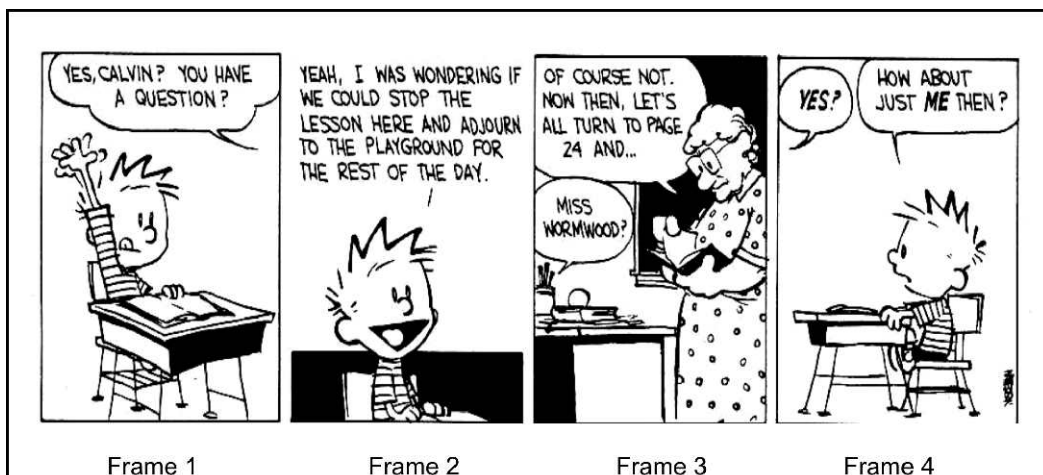
[Source: Essentials]

QUESTIONS: TEXT G

- 1.1.1 Explain how the still (photograph) from the film (the visual text) helps the reader understand that this is an action film. (2)
- 1.1.2 Refer to the review. (2)
- Explain what you consider to be the main interest for a local audience. (2)

TEXT H: OPINION AND ANALYSIS

1.2 CARTOON: Calvin and Hobbes (created by Will Watterson)



QUESTIONS: TEXT H

- 1.2.1 Suggest a reason for Calvin's expression in frame 2. (2)
- 1.2.2 Show how the stereotype of a teacher, in speech and appearance, is created in this cartoon. (2)
- 1.2.3 In your opinion, does Calvin's response in frame 4 make the cartoon amusing? Justify your response. (2)

ANSWER 1: UNDERSTANDING OTHER ASPECTS OF THE MEDIA

1.1 TEXT G: OPINION AND ANALYSIS: FILM REVIEW

- 1.1.1 Consider a 'discussion' of any TWO of the following (from one or more of these categories) FOR 1 MARK EACH:
- Background: Smoke/ People running away from something/ The man in the background is cowering/ The lady's hands are outstretched/ 'Watch It' on left hand side of the still.
 - Body language: The two men running away, under threat/ Clenched fists of both men.
 - Facial expression: Indicating fear, the lady in the background seems to be screaming – mouth is open. (2)
- 1.1.2 Consider relevant responses:
- Buying and selling illicit diamonds.
 - The relationship between people, e.g. the two men of different races/ mercenaries/ identification with African setting. (2)

1.2 TEXT H: CARTOON


- 1.2.1 He hopes that the teacher will listen and respond to his request/ Anticipates a positive response from the teacher. (2)
- 1.2.2 Appearance: The teacher wears glasses, is middle-aged/dresses in an old-fashioned manner/ responds without looking at Calvin. Speech: The teacher gives a curt reply/continues with the lesson/ choice of her name 'Wormwood'. (Award 1 mark for Appearance and 1 mark for Speech.) (2)
- 1.2.3 Yes. Calvin's response changes so that he focuses on himself. In Frame 4, he appears more intent and serious. (2)

OR

No. His response is intelligent as he is able to distinguish between the plural 'we' and the singular 'me'.

(Allow for personal response with appropriate justification.)

(2)
[10]


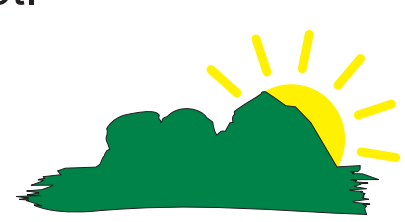


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Dial-a-Tutor

The Mpumalanga Department of Education is implementing a Dial-a-Tutor Programme to assist learners who may experience difficulties with their studies while at home.

Learners can dial the departmental toll free line, **0800 203 116** between 18h00 - 20h00, to be linked with a subject specialist who will give guidance on the spot.

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Mathematical Literacy

TOPIC: MUNICIPALITIES RATES

Question 1

Municipalities charge rates for each property, for example, a house, a flat or a piece of land. Rates are based on the property's value. These rates are a type of tax that is used to pay for the running of a city, and for things like roads and providing water-supply pipes. Municipalities also charge for services they provide to households, like collecting rubbish and providing water. Here is some information about how a municipal-rates account is calculated for households.

There are several charges on a municipal account that vary according to the type of property you own and how much water you consume. The details are as follows.

Single-residential properties

Property rates are based on the total value of the property (building and land). The rate is 0,989c for every rand of the property value (per year).

Refuse collection charge is R38,60 for a wheelie bin (monthly charge).

Water consumption is charge on a stepped tariff. The more water you use, the more expensive it becomes. The table below shows the monthly charges:

Water consumption (kl)	Charge per kilolitre (R)
0–6	free
7–20	2,73
21–40	4,30
41–60	5,46

- The first 6 kl of water are free.
- The next 14 kl cost R2,73 for each kilolitre.
- The next 20 kl cost R4,30 for each kilolitre.
- The next 20 kl cost R5,46 for each kilolitre.

- 1.1 What will the annual Property rates be for one year for a property that is worth R250 000?
- 1.2 What will a household pay for water if they use 9,5 kl in one month?
- 1.3 What will the total amount for rates and water be for one month for a household that uses 9,5 kl of water in the month and lives in a house that is worth R250 000?
- 1.4 Write an equation that expresses how the monthly charge for Property rates and Refuse collection charges (R), in rand, will vary depending on the property's value (V), in rand.
- 1.5 Draw a graph that shows how the monthly charge for Property rates and Refuse collection charges (R), in rand, will vary depending on the property's value (V), in rand. Your graph should include property values from R100 000 to R1 000 000.
- 1.6 Use your graph to read off an estimate for the monthly Property rates and Refuse collection charges for a property that is worth R475 000.
- 1.7 Copy this table and fill in the values that give the monthly charges for the consumption of different quantities of water.

Monthly charge for the consumption of different quantities of water	
Kilolitres consumed	Monthly charge (rand)
6	
7	
15	
20	
21	
30	
40	
41	
50	

- 1.8 Some people would find it easier to understand their water bill if they could use a graph to read off how the total charge for water for the month depends on the number of kilolitres they have used that month. Use the table to draw a graph that shows this.
- 1.9 Use your graph to read off an estimate for the total monthly water charge for consuming 35 kl of water.

[25]

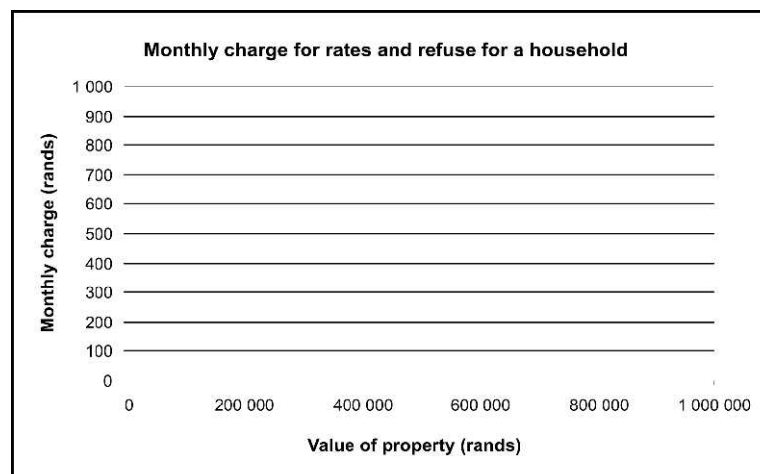
Errata: An Error has occurred regarding Mathematical Literacy with the print of the Second Supplement Edition. Here is the right answers to question 1.1.1, 1.2 and 2.4.

We are sorry for the inconvenience.

Memorandum QUESTION 1

- 1.1 $R250\,000 \times (0,989 \div 100) \checkmark = R2\,472,50 \checkmark$ (2)
- 1.2 $(9,5 - 6) \times R2,73 \checkmark = R9,56 \checkmark$ (2)
- 1.3 $R9,56 + (R2\,472,50 \div 12) \checkmark = R215,60 \checkmark$ (2)
- 1.4 $R = \frac{0,989}{100} V \checkmark + 38,60 \checkmark$ (2)

1.5



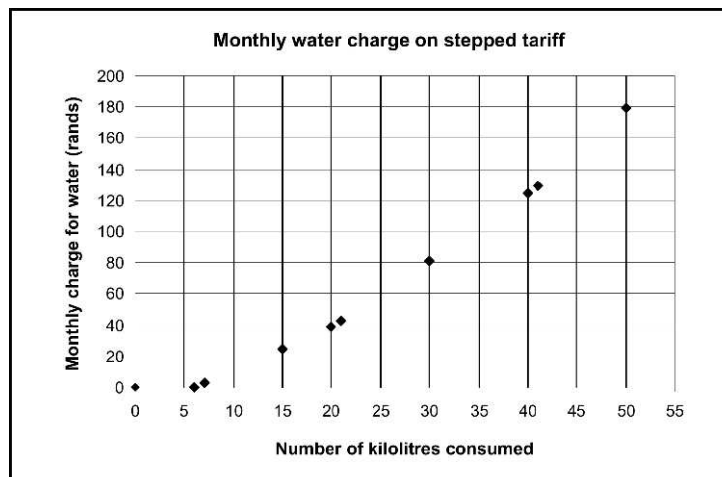
- Explanatory title \checkmark
 - Horizontal axis label and scale up to R1 000 000 ($\frac{1}{2}$)
 - Vertical axis label (including units) and scale ($\frac{1}{2}$)
 - Plot line correctly; start at (0;38,6) \checkmark
 - Plot line correctly; slope of $\approx R82,42$ per R100 000 (value of about R860 for R1 000 000 property). \checkmark (4)
- 1.6 About R425 (accept any value between R410 and R450). \checkmark (1)

1.7

Monthly charge for the consumption of different quantities of water	
Kilolitres consumed	Monthly charge (rand)
6	0
7	
15	$(15 - 6) \times 2,73 = 24,57$
20	$(20 - 6) \times 2,73 = 38,22$
21	$38,22 + (21 - 20) \times 4,30 = 42,52$
30	$38,22 + (30 - 20) \times 4,30 = 81,22$
40	$38,22 + (40 - 20) \times 4,30 = 124,22$
41	$124,22 + (41 - 40) \times 5,46 = 129,68$
50	$124,22 + (50 - 40) \times 5,46 = 178,82$

(6)

(4) 1.8



- Explanatory title \checkmark
 - Horizontal axis label and scale up to 50 \checkmark
 - Vertical axis label (including units) and scale \checkmark
 - Plot lines correctly; four different segments with different slopes ($\frac{1}{2}$ each). $\checkmark\checkmark$ (5)
- 1.9 About R102 (accept any value between R101 and R105). \checkmark (1)

[25]

(6)

1.1.1 Balance = 85% of R140 000 = R119 000
 $i = \frac{0,135}{12} = 0,01125$; $n = 5 \times 12 = 60$

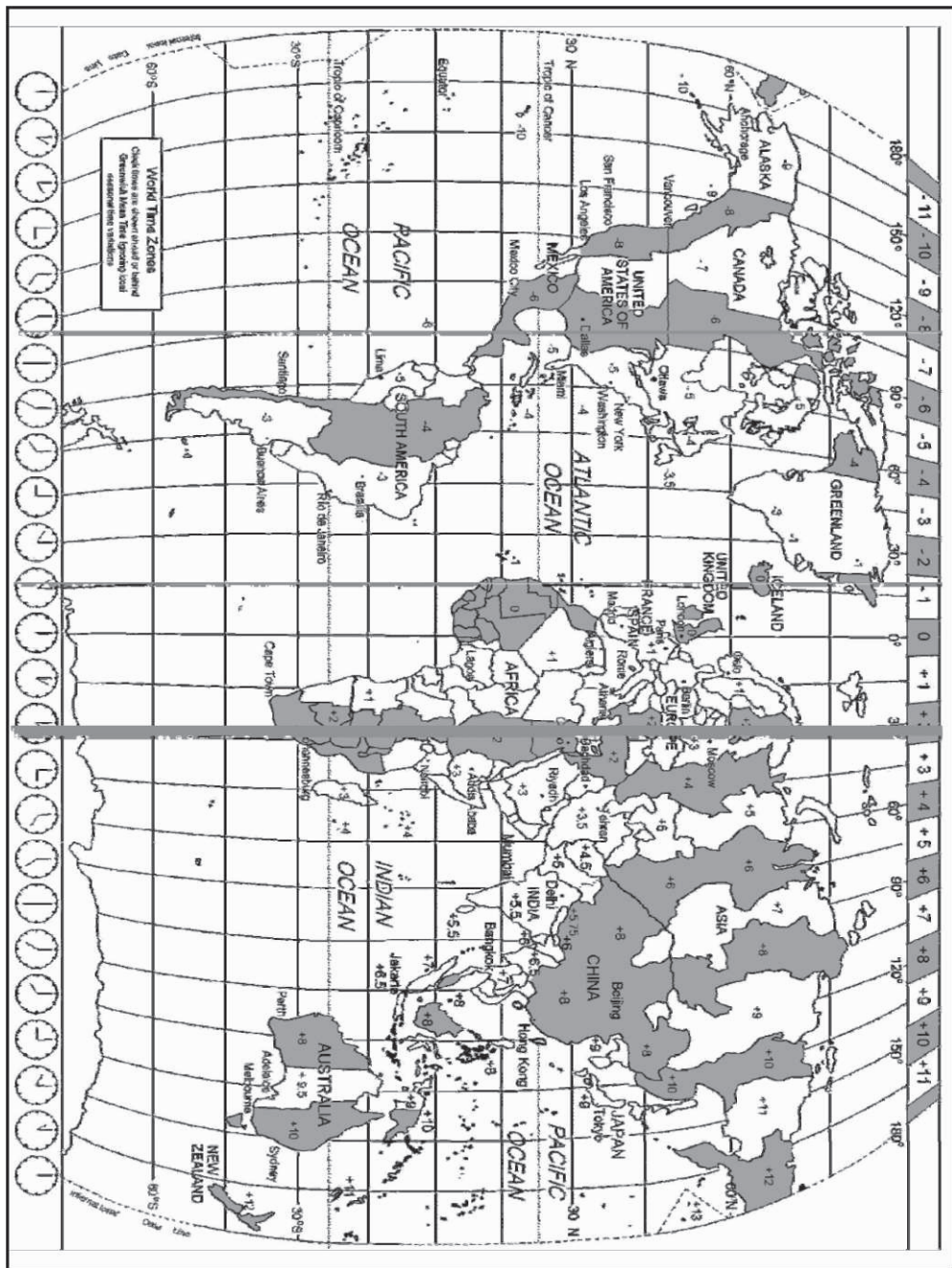
2.4 $F = \frac{x[(1+i)^n - 1]}{i}$
 $5691432,27 = \frac{x[(1+0,0075)^{72} - 1]}{0,0075}$
 $= \frac{x[(1,0075)^{72} - 1]}{0,0075}$
 $= x(95,007)$
 $\therefore x = \frac{5691432,27}{95,007}$
 $= R59\,905,38$

1.2 $(1 + \frac{i}{m})^m = (1 + i_e)$
 $\therefore (1 + \frac{i}{4})^4 = (1 + 0,01125)$
 $\therefore (1 + \frac{i}{4}) = \sqrt[4]{1,01125}$
 $\frac{i}{4} = \sqrt[4]{1,01125} - 1$
 $i_e = (\sqrt[4]{1,01125} - 1)4$
 $= 0,1172$
 \therefore interest rate is 11,72%

Tourism

SECTION D: TOURISM GEOGRAPHY, ATTRACTIONS AND TRAVEL TRENDS

QUESTION 1



1.1 During the 2009 FIFA Confederations Cup, soccer spectators from Washington (-5 UTC) and Tokyo (+9 UTC) flew to South Africa (OR Tambo International Airport) to witness the official opening of the soccer extravaganza (spectacular). The official time for the opening in the Ellis Park Soccer Stadium in Gauteng was 17:00 (local time) on 14 June 2009. The visitors from Washington and Tokyo landed in South Africa three hours before the official opening.

- 1.1.1 Calculate the departure time and the date in Washington if the flying time was 15 hours. (4)
- 1.1.2 Calculate the departure time and the date in Tokyo if the flying time was 18 hours. (4)
- 1.1.3 At the time of their arrival in South Africa, one of the spectators from Tokyo decided to phone his friend in Berlin (UTC+1).
Calculate the time at which the phone call was received in Berlin. (2)

1.2 Jacob is a travel agent and drew up a tour plan for the Washington and Tokyo spectators to the 2009 FIFA Confederations Cup in South Africa.

- 1.2.1 (a) Identify the type of tourist for which this tour plan is being prepared. (1)
(b) Give a reason for your answer. (1)
- 1.2.2 Name TWO facts a travel agent must consider when drawing up an itinerary. (4)
- 1.2.3 Give TWO reasons why a general itinerary would be more suitable for this group than a personalised itinerary for each member of the group. (4)

- 1.3 Explain why the spectators from Washington and Tokyo will need the following information before their trip to South Africa: (2)
- ☐ Climate (2)
 - ☐ Safety (2)
 - ☐ Importance of travel insurance (2)
 - ☐ Exchange rates (2)

SECTION D: TOURISM GEOGRAPHY, ATTRACTIONS AND TRAVEL TRENDS

Markers must keep in mind that learners formulate their answers differently from the marking guideline; markers should therefore read answers carefully to determine where it can be linked to the marking guideline.

QUESTION 1 (ANSWERS)

1.1	1.1.1	Time of Official Opening 17:00 (14/06/2009) Arrival Time 17:00 – 3 hrs = 14:00✓: 14/06/09 14:00 – 15 hrs (travelling time)= 23:00✓ (13/06/2009 – SAST) Time difference SA +2 Washington -5 +2 + -5 = 7 hrs ∴ Washington is 7 hours behind S.A. 23:00 – 7 hrs = 16:00✓ (17:00 if DST is used) 13 June 2009✓ (Award full marks if learners have given the correct answer <u>only</u> without showing their calculations)	LO3 AS12.3.1	(4)
	1.1.2	Time of Official Opening 17:00 (14/06/2009) Arrival Time 17:00 – 3 hrs = 14:00✓ 14/06/09 14:00 – 18 hrs (travelling time)= 20:00 ✓ (13/06/2009 – SAST) SA+2 Tokyo +9 +2 - +9 = 7 hrs ∴ Tokyo is 7 hours ahead of S.A. 20:00 + 7 hrs = 03:00✓ (4:00 if DST is used) 14 June 2009✓ (Award full marks if learners have given the correct answer <u>only</u> without showing their calculations)	LO3 AS12.3.1	(4)
	1.1.3	Time in South Africa = 14:00 Time difference = +1 hr =14:00 -1 ✓ =13:00✓ (14:00 if DST was used) (Award full marks if learners have given the correct answer <u>only</u> without showing their calculations)	LO3 AS12.3.1	(2)
1.2	1.2.1	(a) Sports tourists✓ (b) They were visiting South Africa for a sporting event/soccer match.✓ OR (a) International inbound tourist/foreign tourist (b) They are coming from another country	LO3 AS12.3.2	(1) (1)
	1.2.2	A travel agent needs to know the following: • Budget✓✓ • Date✓✓ • Time • Client profile (Names, country of origin, number of people, next of kin, contact details, hobbies) • Age • Interests • Culture • Religion • Likes and dislikes	LO3 AS12.3.2	(4)
	1.2.3	A general itinerary is made for a <u>group of tourists</u> ✓ with a <u>common interest</u> ✓ whereas a personalised itinerary will focus on an <u>individual</u> ✓ and his or her <u>specific needs</u> .✓	LO3 AS12.3.2	(4)
1.3		• Climate This is important for the visitors to know what to pack. ✓✓ • Safety Visitors are unfamiliar with the country, they need to be warned about safe places to visit and times to visit them.✓✓ • Importance of travel insurance Travel has risks such as loss/theft/injury/unforeseen circumstances . When in another country, travel insurance will cover these risks.✓✓ • Exchange rate They will know how much money the trip will cost them and how much money to carry depending on the rate of exchange between the two countries.✓✓	LO3 AS12.3.3	(2) (2) (2) (2)

History

QUESTION1 : HOW DID THE CIVIL RIGHTS MOVEMENT INFLUENCE CHANGE IN THE UNITED STATES OF AMERICA DURING THE 1960s?

- 1.1 Read Source 3A.
- 1.1.1 What gave rise to the Civil Rights Movement in the United States of America? (1 x 2) (2)
- 1.1.2 Using this source and your own knowledge, explain the following terms:
- (a) Oppression
- (b) Suffrage (2 x 2) (4)
- 1.1.3 Explain the reference to 'southern states'. (1 x 2) (2)
- 1.1.4 How did the Black Power Movement support the Civil Rights Movement? (1 x 2) (2)
- 1.1.5 What do you gather from the statement, 'the struggle was about far more than just civil rights under law'? (1 x 2) (2)
- 1.2 Refer to Source 3B.
- 1.2.1 Name the TWO strategies that were employed by the Civil Rights Movement in 1960 and 1965 (2 x 1) (2)
- 1.2.2 Explain the term *civil disobedience*. (1 x 2) (2)
- 1.2.3 What made private citizens decide to adopt different strategies in the civil rights struggle? (2 x 2) (4)
- 1.2.4 Using the source and your own knowledge, explain how the acts of civil disobedience produced crisis situations. (1 x 2) (2)
- 1.2.5 What were the TWO significant achievements of the Civil Rights Movement? (2 x 1) (2)
- 1.2.6 Explain the usefulness of this source to a historian researching the Civil Rights Movement in the USA. (2 x 2) (4)
- 1.3 Use Source 3C. Please turn over
- 1.3.1 What do you notice about the people in this photograph? (1 x 2) (2)
- 1.3.2 State THREE demands that the organisers of the march wanted to address. (3 x 1) (3)
- 1.3.3 Explain why you think the march to Washington was significant. (1 x 2) (2)
- 1.4 Compare Sources 3B and 3C and explain how the information in Source 3C complements Source 3B. (2 x 2) (4)
- 1.5 Using all the sources and your own knowledge, write a paragraph of about SIX lines (about 60 words) explaining why the Civil Rights Movement in the United States of America was effective. (6)

QUESTION1 : HOW DID THE CIVIL RIGHTS MOVEMENT INFLUENCE CHANGE (ANSWERS) IN THE UNITED STATES OF AMERICA DURING THE 1960s?

- 1.1.1 [Extraction of evidence from Source 3A – L1 – LO1 (AS3)]
- Racial discrimination against African Americans
 - Restoring suffrage (any 1 x 2) (2)
- 1.1.2 [Explanation of concepts – L1 – LO2 (AS1)]
- a) Domination of one group by another
- b) Universal right to vote (2 x 2) (4)
- 1.1.3 [Explanation and interpretation of evidence from Source 3A – L2 – LO2 (AS2)]
- Southern States was identified because it was still practising segregation
 - Heavy concentration of black population
 - Any other relevant response (any 1 x 2) (2)
- 1.1.4 [Interpretation of evidence from Source 3A – L3 – LO2 (AS2)]
- Black Power extended the aims of Civil Rights Movement to include Racial dignity, economic and political self-sufficiency (1 x 2) (2)
- 1.1.5 [Interpretation and evaluation of evidence from Source 3A – L3 – LO3 – (AS2 and 3)]
- The struggle had to include issues like fundamental rights of freedom, respect, dignity and economic and social equality
 - Any other relevant response (any 1 x 2) (2)
- 1.2.1 [Extraction of evidence from Source 3A – L1 – LO1 (AS3)]
- Sit-ins
 - Marches (2 x 1) (2)
- 1.2.2 [Explanation of concepts – L1 – LO2 (AS1)]
- The resistance used by citizens by disobeying rules and laws of the country
 - Any other relevant response (any 1 x 2) (2)
- 1.2.3 [Explanation and interpretation of evidence from Source 3A – L2 – LO2 (AS2)]
- Citizens became frustrated by gradual approaches to implement desegregation by the federal and state government
 - Massive resistance by proponents of racial segregation and voter suppression
 - Any other relevant response (2 x 2) (4)
- 1.2.4 [Interpretation of evidence from Source 3A – L3 – LO2 (AS2)]
- Local authorities acted spontaneously and differently because no clear policy existed
 - Led to civil disobedience
 - Actions of the practitioners favoured (any 1 x 2) (2)
- 1.2.5 [Extraction of evidence from Source 3A – L1 – LO1 (AS3)]
- Judicial victory in the Brown v Board of Education
 - Passage of the Civil Rights Act of 1964
 - Voting Rights Act of 1965
 - Civil Rights Act of 1965 (any 2 x 1) (2)
- 1.2.6 [Explanation and interpretation of evidence from Source 3A – L2 – LO2 (AS2)]
- Events in the source can be backed by authentic evidence
 - Could serve as a stimulus for further research
 - It gives the reasons for the formation of the Civil Rights Movement
 - It describes the type of action and the achievements of the CRM (any 2 x 2) (4)
- 1.3.1 [Explanation and interpretation of evidence from Source 3C – L3 – LO3- (AS2)]
- Leaders of the community marching peacefully
 - Appear respectable and well dressed
 - Black and white leaders marching together in solidarity
 - Any other relevant response (any 1 x 2) (2)
- 1.3.2 [Extraction of evidence from Source 3A – L1 – LO1 (AS3)]
- Voting rights
 - Jobs for all
 - End of segregated races in public schools (3 x 1) (3)
- 1.3.3 [Interpretation and evaluation of information from Source 3C – L3 – LO3 (AS2)]
- Previous marches were done in different states this was the first time they march to the capital
 - Injustice brought to the attention of the headquarters, problems to be addressed nationally
 - To show that black and white can live together
 - The famous 'I have a Dream' speech was made
 - Any other relevant response (any 1 x 2) (2)
- 1.4. [Explanation and interpretation of evidence from Source 3C – L3 – LO3- (AS2)]
- Source 3C complements Source 3B by showing peaceful marchers
 - Source 3C complements Source 3B by showing civil disobedience crisis situation occurred
 - Any other relevant response (any 1 x 2) (2)
- 1.5 [Interpretation, analysis and synthesis of evidence from all sources - L3- LO1 (AS3 and 4), LO2 (AS1,2,3) LO3 (AS 1,2,3,4)]
- Candidates must focus on the following aspects:
- United, focused action
 - Original aim was to abolish discrimination
 - Black power helped by enlarging demands
 - Civil disobedience through non violence changed the content of the struggle
 - Successes in some states encouraged civil rights movement to continue with demands vote
 - Judicial victory added value to Civil Rights Movement
 - Civil Rights Act of 1964 and 1968 sealed the victory of Civil Rights Movement
 - Any other relevant response



education
DEPARTMENT: EDUCATION
MPUMALANGA PROVINCE

QUESTION 1: CONSTRUCTION PROCESSES

- 1.1 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'true' or 'false' next to the question number (1.1.1 – 1.1.10) in the ANSWER BOOK.
- 1.1.1 In a rectangular house with a hipped roof all external walls will bear the load of the roof.
- 1.1.2 One of the purposes of a wall plate in roof construction is to distribute the load of the roof evenly over the load bearing walls.
- 1.1.3 The main purpose of a purlin measuring 76 mm x 50 mm is to keep roof tiles in place.
- 1.1.4 The tops of all door and window frames in a single-storey building should be at the same level.
- 1.1.5 The longest vertical member of a roof truss is the strut.
- 1.1.6 Wire nails are ideal to use for secret nailing to secure tongue and groove ceiling boards to bracing.
- 1.1.7 A rough gauged arch is one that will be plastered.
- 1.1.8 A haunched double mortice and tenon joint can be used to join the bottom rail and stile of a door.
- 1.1.9 Scaffolding is the only means of getting access to the roof of a building.
- 1.1.10 Gang nails can be used to join members of a steel roof truss.

1.2 FIGURE 1.2 on the next page shows the different members of an incomplete junction of a steel roof truss. Refer to the figure and answer the questions that follow.

- 1.2.1 Write down the letters A, B and C in the ANSWER BOOK and next to them what A, B and C indicate.
- 1.2.2 Design on ANSWER SHEET 1.2.2 the gusset plate for this connection. The gusset plate ends 10 mm from the centre lines of the last holes on the outside, as indicated on the tie beam.

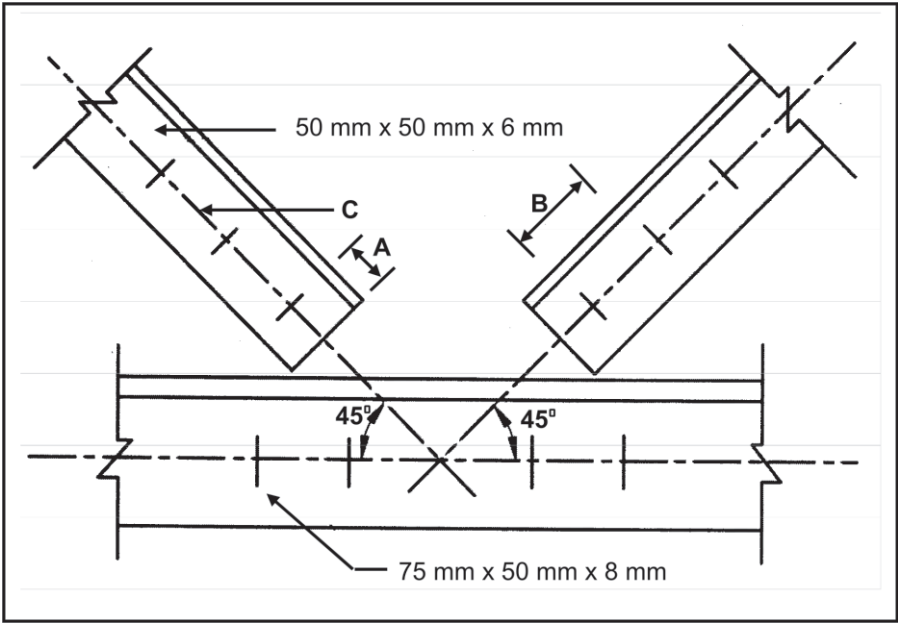


FIGURE 1.2

- 1.3 You are on site and a fellow worker is shocked by an electrical wire. Explain TWO precautionary measures you will take to prevent further electrocution.
- 1.4 Hand tools are an asset to any tradesman. Assume you are a tradesman. Explain how you will take care of your hand tools to ensure that they serve you well in years to come.
- 1.5 Explain THREE safety precautions to be adhered to when setting up a ladder to do maintenance work at high levels in a building.

QUESTION 1 (ANSWERS)

LO3 AS1,2,3,5,7,10

- 1.1 1.1.1 TRUE ✓
1.1.2 TRUE ✓
1.1.3 FALSE ✓
1.1.4 TRUE or FALSE ✓
1.1.5 FALSE ✓
1.1.6 FALSE ✓
1.1.7 TRUE ✓
1.1.8 TRUE ✓
1.1.9 FALSE ✓
1.1.10 FALSE ✓

(10 x 1) (10)

- 1.2 1.2.1 A – Border seam ✓
B – Bolt pitch ✓
C – Back mark ✓ (e.g. Centre Line)
NB: Description of correct term is acceptable

(3)

1.2.2

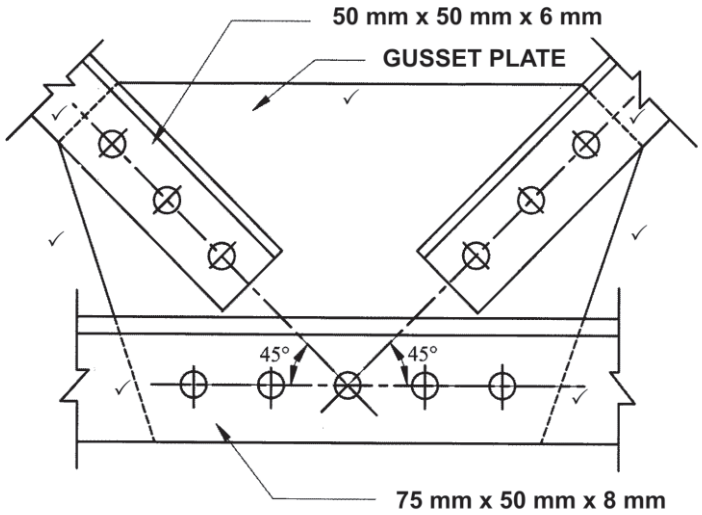


FIGURE 1.2.2

(7)

NB: Different options of the cutting of the gusset plate may also be accepted. See examples in Grade 12 text books.

- 1.3
- Get the person away from the source of electricity.
 - Use a piece of timber or non-conductor to break the contact of electricity from the person.
 - Switch off the power source.
- (ANY TWO OF THE ABOVE OR ANY OTHER SUITABLE ANSWERS) (2)
- 1.4
- Only use the tool for its intended purpose.
 - Wet hands can cause ferrous metals to rust, try to make contact with these parts as little as possible.
 - Remove rust from tools with steel wool only and thereafter apply a thin layer of oil or wax over it.
 - Check tools regularly for defects.
 - Avoid stacking tools on top of each other.
 - Tools must not be left lying around, they must be returned to its proper storage place.
 - Cutting tools must be sharp and its edges protected with a covering.
- (ANY FIVE OF THE ABOVE OR ANY OTHER SUITABLE ANSWERS) (5)
- 1.5
- Take note of overhead electrical cables and avoid contact with it.
 - Place the ladder so that its feet are a quarter of its length away from the object it is resting against.
 - Unless the ladder is securely tied at the top, another person should hold it whilst in use.
 - Wherever possible, the ladder should protrude at least 900 mm above its support.
 - Do not use ladders horizontally as runways or scaffolding.
 - Never place ladders in front of a door without taking precautions.
 - Only one person at a time is to use a ladder.
- (ANY THREE OF THE ABOVE OR ANY OTHER SUITABLE ANSWERS) (3)

[30]