

2010 CHIEF MARKER PUBLICATION REPORT ON MARKING

INSTRUCTIONS FOR COMPLETION

- The report on marking is a comprehensive report that will serve the following three objectives:
 - Provide an evaluation of the question paper and marking guideline.
 - Provide an in-depth analysis of the nature of learner responses, which will facilitate feedback to teaching and learning.
- This report must be completed by the **CHIEF MARKER in conjunction with the senior markers.**
- The report must be completed in detail and single word responses will not be accepted.
- Where additional space may be required, use a separate page which must be appended to this report.
- The final report must be approved and signed by the Head of Examinations in the province.
- The report must be submitted to the responsible WCED official at the marking centre.

SUBJECT	Mathematical Literacy	
PAPER	1	
GRADE	NA	DURATION OF PAPER : 3 hours
PROVINCE	Western Cape	
CHIEF MARKER	NAME: M. Marx 083 309 4994	

PART ONE: EVALUATION OF QUESTION PAPER AND MARKING GUIDELINE

1. COMMENTS ON SPECIFIC QUESTIONS. (SEE PART TWO QUESTION 1 AND 2 OF THIS DOCUMENT)

Question 1: Teach candidates to use calculators properly. BODMAS poorly done.
Conversions badly done.
Question 2: Time concept for some candidates seems to be a problem.
Question 3: Candidates cannot round to the nearest 100.
Question 4: Candidates seem to struggle with range of numbers from negative to positive.
Question 5: Candidates have a problem with measurement – volume, area and perimeter.
Question 6: Candidates have a problem to simplify fractions.

2. YOUR RECOMMENDATION FOR IMPROVEMENT.

Line on graphs too bold.
Graph questions should clearly state – “read from graph”
Next to question number, write in brackets (start on a new page)

QUESTION 1

1. General comment on the performance of candidates. Was the question well answered or poorly answered?
See attachment

2. Why question was poorly answered: Also provide specific examples: See part one question 2.
See attachment

3. Provide suggestion for improvement in relation to the following:

(i) Learning and teaching

Teachers must focus more on the understanding of concepts. Teachers must use practical examples in teaching, where possible. This will enhance understanding.
Candidates should be taught how to work with calculators, many candidates lost marks because they were unable to work properly with a calculator. Candidates should be encouraged to use their own calculators throughout the year so as to get used to it, and not just borrow one on the day of the examination.
Exposure to previous question papers is very important to ensure that candidates have a good idea of the standard of the final examination question papers.
Assessment tasks should be more or less on the same standard as the final examination papers, so that candidates are always aware of the standard that is required of them in the final examination.

<p>(ii) Support HODs should give more support to teachers in their departments. They should sit in on lessons to help with teaching methodology. Curriculum advisers should be notified of problems at schools and asked to sit in on lessons to help with teaching methodology and development of teachers.</p>
<p>4. Describe any observations relating to responses of candidates: e.g positive, negative, outstanding etc. See attachment</p>
<p>5. Any other comments useful to teachers, subject advisors Teachers must remember that continuity in the subject is very important. Teachers must be in their classes at all times and work with candidates in every period.</p>

ATTACHMENT:

ANALYSIS OF THE QUESTION PAPER I

QUESTION 1

QUESTION	PERFORMANCE	COMMENTS
1.1.1a	60%	Candidates were not proficient in the use of the calculator. Throughout the paper marks were lost as a result. The difference between ordinary calculators and scientific algebraic logic calculators must be stressed.
1.1.1b	40%	BODMAS poorly done. Few candidates recognized that the vinculum is a bracket.
1.1.2	30%	Conversion badly done.
1.1.3	50%	Unit mistakes – candidates use (R) instead of DZD
1.1.4	50%	Candidates did not know how many cm in 1m
1.1.5	30%	Candidates should be taught to work with mixed fractions. They could not convert and did not know the meaning of "convert". Many interpreted $6\frac{1}{4}$ as 6 multiplied by $\frac{1}{4}$. This type of error also occurred in other similar calculations.
1.1.6	50%	Substitution was well done, but calculator use was poor.
1.2.1	70%	Well answered
1.2.2 (a & b)	70%	Well answered
1.3.1	80%	Well answered
1.3.2	50%	BODMAS and use of calculator poorly done
1.4.1	50%	Mixed fractions : Candidates did not know how to work with fractions
1.4.2	70%	Well answered
1.5.1	70%	Well answered
1.5.2	70%	Well answered

QUESTION 2

QUESTION	PERFORMANCE	COMMENTS
2..1.1 a	75%	Almost all got the substitution correct. Some mistakes on calculation – many had incorrect unit
2.1.1 b	30% (full marks) 45% (2/3) 25% (1/3)	Substitution correct, but calculation incorrect
2.2.1	70%	Reading from graph
2.2.2	80%	Reading from graph
2.2.3	60%	Many did not subtract the 6 from the 12.
2.2.4	95%	Many candidates understood the question to mean <u>any</u> time after 21 minutes and not "after <u>exactly</u> 21 minutes". This was accepted as valid.
2.2.5	70%	Often switched answer with Q2.2.1
2.2.6	60%	Struggled with adding time when minutes are involved

2.2.7	50%	Many candidates substituted a 1000m, instead of 3000m. Some substituted the time incorrectly.
2.3.1	70%	Rounding percentages before doing calculation: Some chose one of the percentages incorrectly.
2.3.2 a	30%	Candidates found it difficult to divide by the percentage
2.3.2 b	60%	Many candidates could calculate the correct answer, but could not round off to the nearest hundred.
2.3.2 c	50%	Most candidates could read the values from the table, but could not do the calculation
2.3.3	20%	Most candidates could read the values from the table, but could not do the calculation.

QUESTION 3

QUESTION	PERFORMANCE	COMMENTS
3.1.1	30%	Candidates must be trained to work with big numbers
3.1.2	40%	Candidates must be trained to work with big numbers
3.1.3	90%	Some candidates did not know what a bar graph is and some had no idea of scale.
3.2.1	60%	Question understood, but substitution often incorrect.
3.2.2	60%	60% got the answer, but not rounded off to the nearest hectare.
3.2.3	45%	Mistakes with either the multiplication or the values.
3.2.4	50%	Some used values instead of percentages. Some did not multiply by 100%.

QUESTION 4

QUESTION	PERFORMANCE	COMMENTS
4.1.1	60%	The interpretation of the graph was a problem.
4.1.2	70%	Answered reasonably well
4.1.3	70%	Answered reasonably well
4.1.4	40%	The use of negative values on graphs should be taught. This was a problem for some candidates.
4.1.5	50%	Some candidates had no perception of the range. Some identified the values, but did not know what to do.
4.2.1	50%	Substitution well done, but BODMAS applied poorly.
4.2.2	80%	Well answered
4.2.3	40%	Many candidates struggle with conversions. Teachers must spend more time teaching this.

QUESTION 5

QUESTION	PERFORMANCE	COMMENTS
5.1.1	40%	The word "general" was problematic to many candidates. They interpreted it as left, right, up or down.
5.1.2	50%	Some candidates thought the plot was the house, because they interpreted within their social reference.
5.1.3	50%	They forgot to write the units.
5.1.4	50%	They used the slanted side as the perpendicular height.
5.1.5	50%	They used the incorrect trapezium.
5.2.1	30%	Some did not add the values. Others wanted to work out an average because of the wording.
5.2.2 (a & b)	40%	Could not identify the relationships
5.2.3	40%	Candidates could not calculate the number of boxes.

QUESTION 6

QUESTION	PERFORMANCE	COMMENTS
6.1.1	75%	Some used the wrong data set. Others mixed up mean, mode, median and range.
6.1.2	75%	They could identify the probability, but did not write it as a fraction in simplified form. Ratios not accepted.
6.1.3(a, b and c)	60%	Some used the wrong data set. Others confused mean, mode, median and range.
6.2.1	70%	Some gave detailed solutions, calculating the profit.
6.2.2 (a)	95%	Well answered. Some careless plotting of points.
6.2.2 (b)	80%	Question was missed, because some candidates thought the graph was the last question.