# GDE Logo 2011-01-09

# GRADE 8

# MATHEMATICS

# 

# ASSIGNMENT – TERM 1

**MARKS: 50**

**Time : 1 hour**

## This question paper consists of 5 pages.

**INSTRUCTIONS**

**Read the following instructions carefully before answering the questions.**

1. This Assignment consists of 4 questions.

3. **Answer ALL questions on this task sheets.**

1. Write your name and surname as well as your class section in the spaces provided and hand in the whole answer sheet.
2. Clearly show all steps of calculations.
3. Answers only will not necessarily be awarded full marks.
4. An approved scientific calculator (non-programmable and non-graphical) may be used, unless stated otherwise.
5. If necessary, answers should be rounded off to TWO decimal places, unless stated

otherwise.

1. Write legibly, neatly and use a blue ink pen.

|  |  |  |  |
| --- | --- | --- | --- |
| **QUESTION 1:** | | |  |
| 1.1 | Write down the factors of 30. | | (1) |
|  |  | |  |
| 1.2 | The following sum was answered by a gr 8 learner:  5 x 9 + 6  = 75  State if the answer is correct or incorrect. Give reasons. Also write the correct answer. | | (3) |
|  |  | |  |
| 1.3 | Answer the following questions: | |  |
|  |  | |  |
|  | 1.3.1 | List all the prime factors of 60. | (1) |
|  | 1.3.2 | List the factors of 60 that are even numbers. | (1) |
|  | 1.3.3 | Make a list of the even, compound factors of 60. | (1) |
|  |  |  |  |
| 1.4 | Determine the HCF of 36 and 96 | | (1) |
|  |  | |  |
| 1.5 | Write 75 as a product of its prime factors. | | (3)  **[11]** |
|  |  | |  |
|  |  | |  |
| **QUESTION 2:** | | |  |
| 2.1 | The Grade 8 learners decided to start living more healthily. They will either jog or cycle. There are 125 Grade 8 learners and they jog and cycle in the ratio 3:2. Calculate how many learners participate in each sport? | | (3) |
|  |  | |  |
| 2.2 | Jannie receives R150 pocket money per month. In the new year his mother decided to increase his pocket money in the ratio 6:5. Calculate Jannie’s adjusted monthly pocket money. | | (2) |
|  |  | |  |
| 2.3 | Khaya is delivering groceries to his mother who stays 8km from the shop. How long will it take him to cover this distance if he drives at an average speed of 65km/h? Give your answer rounded to the nearest minute. | | (3) |
|  |  | |  |
| 2.4 | Calculate: | |  |
|  |  | |  |
|  | 2.4.1 |  | (5) |
|  |  |  |  |
|  | 2.4.2 | Write 3 570 000 the following in scientific notation. | (2)  **[15]** |
|  |  |  |  |
| **QUESTION 3:** | | |  |
|  |  |  |  |
| 3.1 | The temperature in Austria one morning was -5°C at 08:00 and increased by 2°C every hour until 12:00. What will the temperature be at 11:30? | | (1) |
| 3.2 | Calculate showing steps(without calculator): | |  |
|  |  | |  |
|  | 3.2.1 |  | (1) |
|  | 3.2.2 |  | (2) |
|  |  |  |  |
| 3.3 | Give the missing input and output values from (a) to (f) in the flow diagrams below. | |  |
|  |  | |  |
|  | 3.3.1 |  | (3) |
|  | 3.3.2 |  | (5) |
|  |  | |  |
| 3.4 | Michael, a farmer, wants to buy a new tractor. The price of the tractor is R160 000, VAT excluded. He can afford a deposit of R20 000. He decides to buy the tractor on hire purchase over a period of 60 months and simple interest of 10%. What would he pay in total after 60 months? | | (4)  **[16]** |
| **QUESTION 4** | | |  |
|  |  |  |  |
| 4.1 | Fill in the next 2 terms/numbers/shapes in the following patterns: | |  |
|  |  | |  |
|  | 4.1.1 | 1; 3; 9; ……… ; ………. | (2) |
|  |  |  |  |
|  | 4.1.2 | -15; -8; -1; ………; …….. | (2) |
|  |  |  |  |
|  | 4.1.3 |  | (2) |
|  |  |  |  |
|  | 4.1.4 | ; ………. ; ……… | (2)  **[8]** |
|  |  | **TOTAL – 50 MARKS** | |