***DEPARTMENT OF NATURAL SCIENCES***

***LESSON PLAN***

***NAME OF TEACHER****: ………………………* ***DATE****:*

***SUBJECT****: MATHMATICS* ***DURATION****:80MINUTES*

***TOPIC****: RELATION AND FUNCTIONS* ***CLASS:*** *11*

***SUBTOPIC****: MAPPING* ***NO OF BOYS…….***

***GIRLS…….***

***REFERENCES****: Progress in mathematics grade 11 pg 78*

***TEACHING LEARNING /AIDS****: learners book, chalk board and chart*

***RATIONALE****: : This is lesson one on composite functions. Teacher Exposition, Demonstration, Question and answer and group or class discussion methods will be used. This lesson will develop learners knowledge about Composite functions. The skill of Representation of composite functions. The value of Logical thinking in solving inverse and composite functions and Appreciation of functions*

***LEARNING OUTCOMES: L.S.B.A.T:***

* *State the domain and range*
* *Illustrate the function in mapping diagram*

***PREREQUISITE KNOWLEDGE****: Learners have ideas about the topic being taught.*

***LESSON INTRODUCTION*** *revises through the previous lesson*

***LESSON DEVELOPMENT***

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| --- | --- | --- | --- |
| *CONTENT* | *TEACHER’S ACTIVITY* | *PUPIL’S ACTIVITY* |  |
| *EXAMPLE* *The function is given by the rule f(x)=2x+1.ggiven the domain d={x:x*$<6,x\in N$*}*1. *State the domain*
2. *Range*
3. *illustrate the function f(x)=2x+1*

***SOLUTION***1. *domain{1,2,3,4,5}*
2. *range {3,5,7,9,11}*

*c. 1 3* *2 5*  *3 7*  *4 9* *5 11* *x y=2x+1****EXAMPLE 2****The function is given by the rule f(x)=3x-5.Given the domain d=={x:x*$>4,x\in P$*}.state*1. *domain*
2. *range*
3. *illustrate the function f(x)=3x+5 in a map[ping diagram.*

***EXERCISE*** *1.The function is given by the rule f(x)=x-4,the set of the domain d={x: x*$<4,x\in R$*}.state the domain* *a. domain**b. range**c. illustrate the f(x)=x-4 in a mapping diagram.**2.The function is given by the rule f(x)=2x-1the set of the domain d={x: x*$>3,x\in Z$*}.state the* *A .domain* *b. range**c illustrate the function f(x)=2x-1 in a mapping diagram* | *Teacher to write the example on the board* *Teacher to solve on the board* *Teacher to write the exercise on the board*  | *Learners to write the example in their exercise books* *Learners to listen attentively* *Volunteer learners to go and solve on the board* ***EXPECTED ANSWER****A . d= {5,7,9}**b. R={10,16,22}**c.* *5 10* *7 16* *9 22* *X f(x)=3x+5* *Learners to write the exercise in their exercise books* ***EXPECTED ANSWER*** *Q1*1. *d={1,2,3}*
2. *r={-3,-2,-1}*

 *1 -3*  *2 -2*  *3 -1* *X f(x)=2x-1**Q2*1. *d={4,5,6}*
2. *r={-9,-11-13}*

*c.* *4 -9*  *5 -11*  *6 -13* *X f(x)=2x-1* |  |

***Lesson conclusion:*** *Tr to conclude lesson by revising through the lesson with leaners to help remedial learners*

***Learners evaluation:***

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***Teachers evaluation:***

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