

EaD Comprehensive Lesson Plans



or



0248043888

NAME OF TEACHER:

WEEK ENDING.....20-01-2023.....

NUMBER ON ROLL:

SUBJECT... MATHEMATICS

DURATION:

REFERENCE...MATHS SYLLABUS(CRDD,2007), MATHS FOR JHS

FORM.....BASIC 9.....

WEEK.....2.....

<u>DAY/DATE</u>	<u>TOPIC/SUB-TOPIC/ASPECT</u>	<u>OBJECTIVES/R.P.K</u>	<u>TEACHER-LEARNER ACTIVITIES</u>	<u>T/L MATERIALS</u>	<u>CORE POINTS</u>	<u>EVALUATION AND REMARKS</u>
<p>MONDAY</p> <p>9:15AM - 10:25AM 70min</p>	<p>Topic; Application of Sets</p> <p>Sub-Topic; Set of numbers</p>	<p>By the end of the lesson the Pupil will be able to;</p> <p>List the members of sets of numbers.</p> <p>RPK Pupils were taught lessons on set in basic 8</p>	<p>Introduction Pupils brainstorm to explain the meaning of set.</p> <p>Activities</p> <ol style="list-style-type: none"> 1. Demonstrate listing the members of sets of numbers. 2. Assist Pupils to list special sets of numbers. 3. Learners brainstorm to <p>Closure Pupils in small groups to practice finding</p>	<p>Chart, Pictures Power point Presentation.</p>	<p>o Set of Natural numbers The set of natural numbers is denoted as N; so: $N=\{1,2,3,4,5,6,\dots\}$</p> <p>o Set of Integers; They are denoted by the symbol Z and can be written as: $Z=\{\dots, -2,-1,0,1,2,3,4,\dots\}$</p> <p>o Set of Rational numbers; Rational numbers are those numbers which can be expressed as a division between</p>	<p>Exercise; Write 5 examples each of the sets of the following;</p> <ol style="list-style-type: none"> i. real numbers ii. natural numbers iii. set of integers iv. irrational numbers

			members of sets of numbers.		<p>two integers. The set of rational numbers is denoted as Q, so: $Q = \{p/q, p, q \in \mathbb{Z}\}$</p> <p>o Set of Irrational numbers</p> <p>irrational numbers is the complementary of the set of rational numbers.</p> <p>Some examples of irrational numbers are;</p> <p>$\sqrt{2}, \pi, \sqrt[3]{5}$, and for example $\pi = 3,1415926535\dots$ comes from the relationship between the length of a circle and its diameter.</p>	
<p>TUESDAY</p> <p>10:50AM – 12:00PM</p> <p>70min</p>	<p>Topic; Application of Sets</p> <p>Sub-Topic; Complements of Sets</p>	<p>By the end of the lesson the Pupil will be able to;</p> <p>Find the members of a complement set.</p> <p>RPK</p>	<p>Introduction Review Pupils knowledge on the properties of a complement set.</p> <p>Activities</p>		<p>Complement Sets;</p> <p>Example of Complement of a Set</p> <p>If the universal set is all prime numbers up to 25 and set $A = \{2, 3, 5\}$ then the complement of</p>	<p>Exercise;</p> <p>1: If $B = \{p \mid p \text{ is a multiple of } 3, p \in \mathbb{N}\}$. Find B' ($p \in \mathbb{N}$ in the bracket indicates \mathbb{N} is the universal set) where \mathbb{N} is the set of natural numbers.</p> <p>2. If U is the universal set containing 50 students of class X of a coeducational school and A be the set of all girls and it contains 25 girls. Find</p>

		Pupils have been taught the meaning of complement set.	<ol style="list-style-type: none"> 1. Discuss the meanings and examples of Universal set and subset. 2. Demonstrate finding the complement set of set of numbers. 3. Assist Individual Pupils in finding the complement set of sets of numbers. <p>Closure Pupils practice finding complement set of sets of numbers.</p>		<p>set A is other than the elements of A.</p> <ul style="list-style-type: none"> • Step 1: Check for the universal set and the set for which you need to find the complement. $U = \{2, 3, 5, 7, 11, 13, 17, 19, 23\}$, $A = \{2, 3, 5\}$. • Step 2: Subtract, that is $(U - A)$. Here, $U - A = A'$ $= \{2, 3, 5, 7, 11, 13, 17, 19, 23\} - \{2, 3, 5\}$ $= \{7, 11, 13, 17, 19, 23\}$ 	<p>the number of elements of the complement of a set of girls?</p> <p>3. Find the complement of set A and set B also show $(A \cup B)' = A' \cap B'$, where $U = \{11, 12, 13, 14, 15, 16\}$, $A = \{12, 13\}$ and $B = \{13, 14, 15\}$?</p>
<p>FRIDAY</p> <p>9:15AM – 10:25AM 70mins</p>	<p>Topic; Application of Sets</p> <p>Sub-Topic; Complement laws.</p>	<p>Objective By the end of the lesson the Pupil will be able to;</p> <p>Apply the laws of complement .</p> <p>RPK Pupils can already explain the meaning of complement set.</p>	<p>Introduction Discuss the properties of complement of a set with the Pupils.</p> <p>Activities</p> <ol style="list-style-type: none"> 1. Assist Pupils to identify the laws of Complement set. 2. Demonstrate applying the 		<p>Properties of Complement of a set</p> <p>Following are the properties of the complement of a set that includes complement laws, the law of double complementation, the law of empty set and universal set, and de morgan's law.</p> <p>Complement Laws</p>	<p>Exercise;</p> <ol style="list-style-type: none"> 1. Given are the two sets. <ul style="list-style-type: none"> • $P = \{2, 3, 5, 7, 11\}$, $P' = \{2, 3, 5, 7, 11\}$ • $PP' = \{4, 6, 8, 9, 10\} = \{4, 6, 8, 9, 10\}$ <p>Find $P \cap P' \cap P'$</p> <ol style="list-style-type: none"> 2. If $U = \{1, 2, 3, 4, 5\}$ and $A = \{4, 5\}$ and $B = \{1, 2\}$, find $A \cap A'$

			<p>laws of complement of sets to find complement sets of numbers.</p> <p>3. Pupils brainstorm to apply the laws of complements of sets.</p> <p>4. Discuss the law of double complementation with the Pupils.</p> <p>Closure Pupils practice applying the law of double complementation.</p>		<ul style="list-style-type: none"> • If A is a subset of the universal set then A' is also a subset of the universal set, therefore the union of A and A' is the universal set, represented as $A \cup A' = U$ • The intersection of Set A and A' provides the <u>empty set</u> "\emptyset", represented as $A \cap A' = \emptyset$ <p>For example, If $U = \{1, 2, 3, 4, 5\}$ and $A = \{4, 5\}$ and $B = \{1, 2\}$ $A' = \{1, 2, 3\}$ and $B' = \{3, 4, 5\}$ $A \cup A' = U = \{1, 2, 3, 4, 5\}$ Also, $A \cap A' = \emptyset$</p> <p>Law of Double Complementation</p> <ul style="list-style-type: none"> • In this law, the complement of the complemented set is the original set, $(A')' = A$ • The complement of the set A', where A' itself is the 	
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					<p>complement of A, the double complement of A is thus A itself.</p> <p>In earlier example, $U = \{1, 2, 3, 4, 5\}$ and $A = \{4, 5\}$ then $A' = \{1, 2, 3\}$. The complement of $A' = (A')' = \{4, 5\}$ which is equal to set A</p>	
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School:

District: