|  |
| --- |
| **DAILY LESSON PLAN** **MATHEMATICS FORM 4** |
| **CLASS** |  | **DAY** | Choose an item. |
| **WEEK** | Choose an item. | **TIME** |  |
| **DATE** | Click or tap to enter a date. | **DURATION (minutes)** |  |
| **LEARNING AREA** | Relationship and Algebra |
| **UNIT/TOPIC** | Quadratic Functions and Equations in One Variable |
| **CONTENT****STANDARDS**  | 1.1 Quadratic Functions and Equations | **LEARNING STANDARDS**  | 1.1.1 until 1.1.4 |
| **LEARNING OBJECTIVES** | **At the end of learning, students will be able to:*** Identify and describe the characteristics of quadratic expressions in one variable.
* Recognise quadratic function as many-to-one relation, hence, describe thecharacteristics of quadratic functions.
* Investigate and make generalisation about the effect of changing the values of 𝑎, 𝑏 and 𝑐 on graphs of quadratic functions, $f\left(x\right)=ax^{2}+bx+c$.
* Form quadratic functions based on situations, and hence relate to the quadratic equations.
 |
| **ACTIVITY** | **Starter:**Teacher explains the learning contents using PPT Chapter 1. **Activity:**1. Divide students into few groups.
2. Each group is requested to list down the characteristics of quadratic functions that can be recognised by students through discussion with group members.
3. Teacher creates a bubble map on the blackboard and a representative from each group writes a characteristic obtained.
4. Teacher explains the correct characteristics of quadratic functions to students.
5. Teacher shows the effect of changing the values of 𝑎, 𝑏 and 𝑐 on graphs of quadratic functions, $f\left(x\right)=ax^{2}+bx+c$ using computer software.

**Closure:**1. Teacher gives exercises to students and discusses all answers.
2. Teacher gives lesson conclusions to students.
 |
| **REFLECTION** | [ ]  Students were able to achieve the learning objectives successfully.[ ]  Students were able to achieve the learning objectives with guidance.[ ]  Students were not able to achieve the learning objectives. |

|  |
| --- |
| **DAILY LESSON PLAN** **MATHEMATICS FORM 4** |
| **CLASS** |  | **DAY** | Choose an item. |
| **WEEK** | Choose an item. | **TIME** |  |
| **DATE** | Click or tap to enter a date. | **DURATION (minutes)** |  |
| **LEARNING AREA** | Relationship and Algebra |
| **UNIT/TOPIC** | Quadratic Functions and Equations in One Variable |
| **CONTENT****STANDARDS**  | 1.1 Quadratic Functions and Equations | **LEARNING STANDARDS**  | 1.1.5 until 1.1.8 |
| **LEARNING OBJECTIVES** | **At the end of learning, students will be able to:*** Explain the meaning of roots of a quadratic equation.
* Determine the roots of a quadratic equation by factorisation method.
* Sketch graphs of quadratic functions.
* Solve problems involving quadratic equations.
 |
| **ACTIVITY** | **Starter:**Teacher explains the learning contents using PPT Chapter 1. **Activity:**1. Teacher shows how to sketch the graph of quadratic function using the computer software.
2. Divide students into few groups.
3. Each group is given a quadratic function and discuss with group members to sketch the graph of the quadratic function. Identify the maximum or minimum point, the roots and the y-intercept of the graph.
4. A representative from each group shows the result obtained.
5. Teacher shows the graph of the quadratic function using the computer software.

**Closure:**1. Teacher gives homework to students.
2. Teacher gives lesson conclusions to students.
 |
| **REFLECTION** | [ ]  Students were able to achieve the learning objectives successfully.[ ]  Students were able to achieve the learning objectives with guidance.[ ]  Students were not able to achieve the learning objectives. |