Lesson Plan

Supervisor: Dr LAM Bick Har

Topic: Graphic linear equations   *Level*: Form 3

Subject: Mathematics   *Time of lesson*: 60 minutes (a double lesson)

Learning Objectives: upon completion of lesson, students are able to:

Cognitive:

- understand the geometrical meaning of the x & y axes and slope
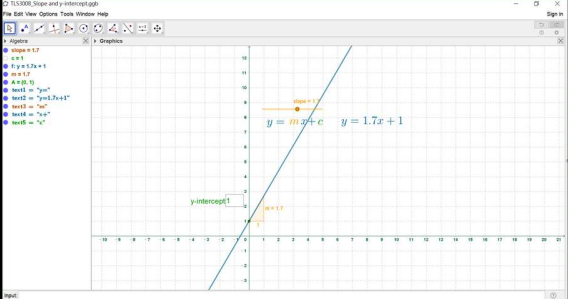- recognize the formation of RISE/RUN is equal to the slope of straight line

Skill:

- plot the graph by observing the linear equations
- compare and find the relation between 2 linear equations
- obtain information from the graph to construct a linear equation

Affective:

- enhance interest in learning Mathematics
- build logical and critical thinking
- learn from peers through cooperative learning

Teaching Resources (see appendix)

- YouTube video
- GeoGebra
- Reading materials and guiding questions
- Jigsaw quiz
- Kahoot

Purpose of Teaching/Stage	Teaching sequences and activities
Class Activity (8 mins) Gain attention from students on the new topic	1.Teacher plays video clips about basic linear equations. (https://www.youtube.com/watch?v=1O12C9EcdFo) (see Appendix 1)
Explanation (12 mins) Construct the basic idea and classify the main features of linear equation	1.Use GeoGebra to show the relationship between points and line by joining the two distinct points (see Appendix 2) 2.Teacher then points out the position of x&y intercepts 3.Teacher questions the students which line is steeper and invites them to point out the line

Jigsaw and practice (30+5mins) Students can learn from cooperative learning Consolidate their concept by finishing a WS Use Kahoot to check if they truly understand the concept.	In Jigsaw, 1.Teacher divides the class into groups of three 2.Each student receives learning materials about parallel and perpendicular, slope, x&y intercept 3.Read the learning materials on their own 4.Form expert groups 5.Home group report 6.Do Multiple Choice Quiz individually and draw the line graph with the given equation 7.Check answers and clarify their misunderstanding 8.Group with the highest total Quiz mark is rewarded 1.Kahoot (Choose the linear equation with steeper slope, Choose equations with parallel or perpendicular graph, Calculation relating to linear equation) (5 mins)
Feedback (5mins) Foster the supportive learning environment	1.Give feedbacks and share what they've learnt through Q&A