

## 21<sup>st</sup> Century Lesson Cycle Template

**Grade: 10**

**Subject: Math 10 PreIB**

**Textbook: Mathematics for the International Student Pre-Diploma SL and HL (second edition) by Haese & Harris**

**Topic 4: Linear Equations**

### Driving Question:

How do we determine the equation of a line?

### Specific Curriculum Outcome:

**RF04** Students will be expected to describe and represent linear relations using words, ordered pairs, table of values, graphs and equations.

**RF05** Students will be expected to determine the characteristics of the graphs of linear relations, including the intercepts, slope, domain, and range.

**RF6** Students will be expected to relate linear relations to their graphs expressed in slope-intercept form

### Prior Knowledge:

- Graphing linear equations

### Screencast Link(s):

1. Prior knowledge: Graphing Linear Equations - <https://www.youtube.com/watch?v=wYeRkxgyqGo>
2. Determining the Equation of a Line - <https://www.youtube.com/watch?v=UguPdZH5jDo>

### Link to Partner Online Quiz:

[http://www.softschools.com/quizzes/algebra/linear\\_equations\\_with\\_a\\_slope\\_a\\_point/quiz4932.html](http://www.softschools.com/quizzes/algebra/linear_equations_with_a_slope_a_point/quiz4932.html)

**Expected Time: One Class (75 minutes)**

**Resources:  
(Tools & Tech)**

**Lesson Procedure**

**Prior knowledge** screencast linked to teacher website. Students have the

*I do:*

1. Review **prior knowledge** that is directly applicable to this lesson:
  - Graphing linear equations by hand



- |  |   |
|--|---|
| <input type="checkbox"/> find, validate                  | <input type="checkbox"/> <b>critical thinking</b> |
| <input type="checkbox"/> remember, understand            | <input type="checkbox"/> evaluate, leverage       |
| <input type="checkbox"/> <b>collaborate, communicate</b> | <input type="checkbox"/> <b>create, publish</b>   |
| <input type="checkbox"/> analyze, synthesize             |   |

**WRAP UP/REMINDERS:**

Students will be asked to review all of today's material for homework in preparation for tomorrow's class.

**Differentiation:**

**Modification:**

Allowing students to watch the video on their own devices allows them to work at their own pace. If students need to re-watch a step they have the ability to do so.

**Enrichment:**

Students who have a strong grasp of linear equations can be partnered up with students who may be struggling so that they can provide them with some assistance.

**Evaluation:**

Students will be informally evaluated during the class. The teacher will make general observations while circulating throughout the class to make sure all students are on track. As well, the group quiz will provide some feedback as to where students are in their understanding of this topic.

**Teacher Reflection:**

**On-Line Resources:**

[Linear Equation Quiz](#) provided free from Softschools.com  
[Online Mind Map](#) created through bubbl.us