**Integrated II Unit 8: Triangle Congruence and Proof**

**Universal Essential Question: Why is resilience an influence on success?**

**Content Essential Question: How does adaptation play a role in resilience?**

|  |  |
| --- | --- |
| **Learning Objectives**At the completion of this unit, I should … | **Self-Rating, evidence from my INB and practice papers**0 – I have no idea.1 – I cannot solve problems yet but I am beginning to understand the strategies2 – I can solve problems but do not yet know why the math works.3 – I understand why the math works and can solve most problems but still make mistakes.4 – I understand why the math works and can consistently and accurately solve problems.  |
| **Know** * The formats of proofs
* The properties of equality and congruence
* Vocabulary of geometry
 |  |  |  |
| **Be able to*** Make valid conclusions based on a chain of conditional statements.
* Use a flowchart to prove statements.
* Write proofs involving congruent triangles.
* Write flowchart, two-column, and

paragraph proofs.* Write proofs involving quadrilaterals.
 |  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| **Understand*** What constitues a mathematical argument?
 |  |  |  |

**Vocabulary of congruence and proof**

Proof

Reasons

Given

Flowchart

Two column

Hypothesis

Conditional

Statement

Paragraph

Properties of Equality: addition, subtraction, division, multiplication, symmetric, reflexive, transitive

Properties of Congruence: symmetric, reflexive, transitive

**Reflection page**

|  |  |
| --- | --- |
| Areas of success for this unit and justification | Areas that need more practice and/or deeper understanding, justification, and specific goals to achieve complete mastery |

How does the mathematics we studied in this unit relate to the content and universal essential questions? Be specific by providing evidence from your learning activities for the unit.