Adding Fractions Logic Model

Title of the Module: Adding Fractions

Intended learners/audience: Female trades pre-apprenticeship students

Intended roles(s) learners are preparing for: Entry level construction trades worker or apprentice

Prerequisites:

- The Grit and Growth Mindset module
- The Perimeter and Area of Polygons module
- The Fractions and Measurement module
- The Multiplying Fractions module

Revision date: 11/21/15

Knowledge, Skills, & _ Attitudes	Performance Tasks	Objectives	Intended Outcomes
If learners begin the training with the prerequisites and learn this content	and <i>demonstrate</i> their learning in these ways	we can be confident that they will be able to do these things by the end of the training	which will prepare them to do these things <i>after the training</i>
Declarative Knowledge A common denominator* is when two or more fractions have the same bottom number Discrimination Determining whether two denominators are common or not Recognizing equivalent fractions Procedure Finding common denominators* Converting between fractions and mixed numbers	 Given a set of fractions and word problems involving fractions with common and different denominators, add the fractions Given a set of mixed numbers and word problems involving mixed numbers with common and different denominators, add the mixed numbers 	 Explain what a common denominator* is Find common denominators* Add fractions Add mixed numbers 	Calculate the amount of material needed to successfully complete construction projects

Principles		
When adding two positive fractions, the		
positive fractions, the result is always greater		
than any of the fractions being added		
When renaming a		
fraction to make it equivalent to another,		
both the top and bottom numbers must		
change		
Attitudes		
• Grit		
Growth mindset		
 Belief in the ability to reduce math anxiety 		
Knowledge, Skills, & Attitudes	Performance Tasks	Performance Tasks Objectives

^{*} "Bottom number" is used in place of "denominator" in this module.