



INSTITUTE FOR THE PROFESSIONAL
DEVELOPMENT OF ADULT EDUCATORS

Diving Deeper into IPDAE's Matrix Suite for ABE and GED

March 25, 2020

www.floridaipdae.org

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National Trainer/Facilitator

for ABE, GED & ESOL

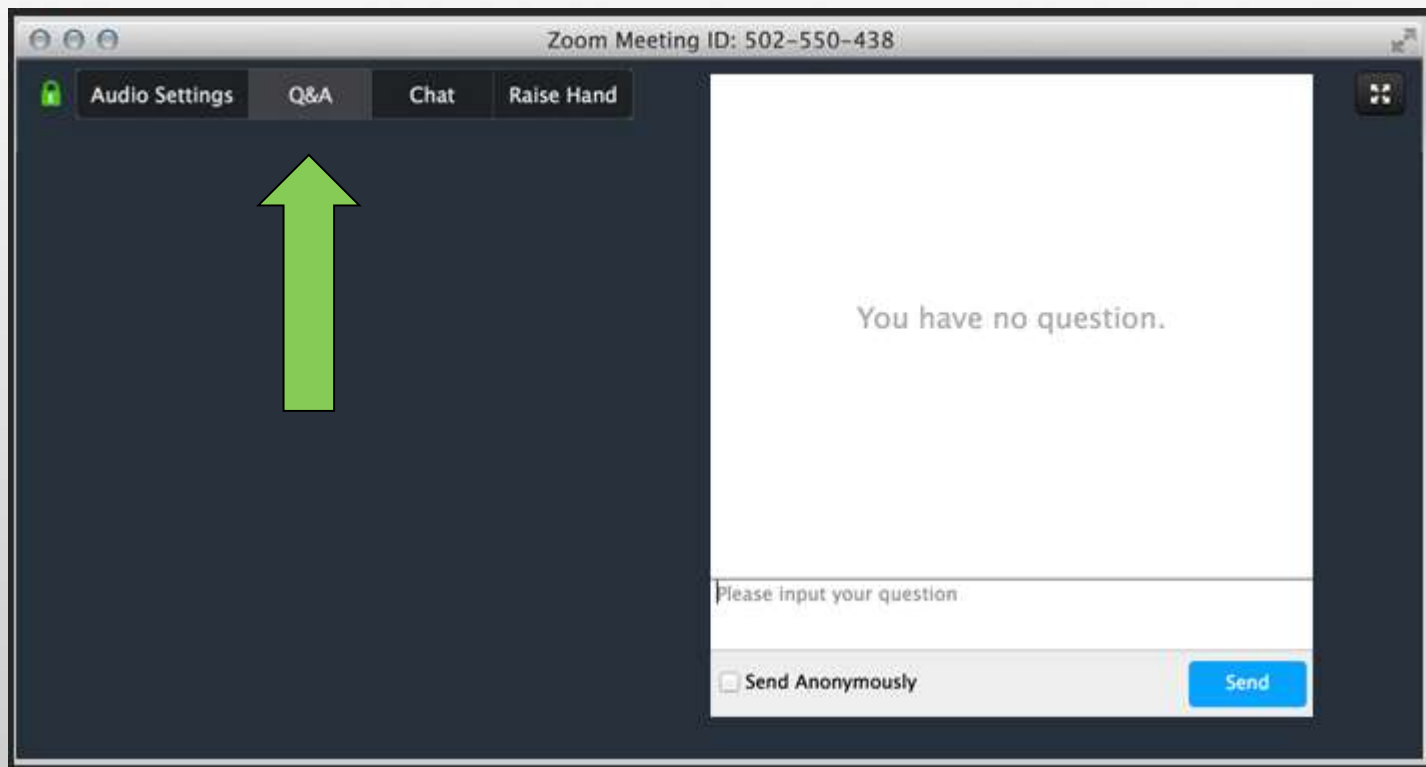
Florida IPDAE

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(772) 462-7409



- If you have a question, please type it into the **Q&A** option.



- Attendee microphones will be muted. You will be in **listen only** mode.
- Today's presentation is being **recorded**. It will be archived and available on the IPDAE website within 48 hours.

- I. Recognize the qualities of each Matrix Suite resource
- II. Discuss the applications of each or a combination of Matrix Suite resources to promote student performance
- III. Explore other applications of the Matrix Suite Resources



- I. Overview
 - A. Core Matrices
 - B. Individualized Student Plans (ISP's)
 - C. Resource Activities
- II. Applications of Matrix Suite Resources
- III. Question and Answer
- IV. Evaluation





ABE Mathematics Matrix

Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Fractions and Decimals					
4. Geometry					
5. Number and Operations: Fractions					
6. Ratios and Proportions					
7. The Number System					
8. Exponents and Powers					
9. Statistics and Probability					
10. Functions					

- 10 Domains
- 227 Cells
- NRS Levels 1 – 6

- Aligned to CCRS and Curriculum Frameworks
- Uses common language/terminology
- Logically sequenced
- Clustered skills
- Organized by NRS Level



ABE Writing & GED Math Matrices

Adult Basic and Adult Secondary Education Writing Curriculum Matrix					
Domain	NRS 1	NRS 2	NRS 3	NRS 4	NRS 5/6
1. Writing Domains					
1.1. Writing Domains					
1.2. Writing Domains					
1.3. Writing Domains					
1.4. Writing Domains					
1.5. Writing Domains					
1.6. Writing Domains					
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1.89. Writing Domains					
1.90. Writing Domains					
1.91. Writing Domains					
1.92. Writing Domains					

GED Mathematical Reasoning PLD Matrix				
Domain	Level 1 Below Passing Limited/Inconsistent	Level 2 Passing (HS Equivalency) Satisfactory	Level 3 College Ready Strong	Level 4 College Ready + Credit Outstanding
1. Rational Numbers	<p>Identify number properties including multiples and factors.</p> <p>Compute unit rates.</p> <p>Identify real-world problems involving rational numbers.</p>	<p>Perform computations with rational numbers.</p> <p>Identify real-world problems involving rational numbers.</p> <p>Identify real-world problems involving rational numbers.</p> <p>Identify real-world problems involving rational numbers.</p>	<p>Determine when a rational number is a solution to a problem.</p> <p>Identify real-world problems involving rational numbers.</p> <p>Identify real-world problems involving rational numbers.</p>	<p>Determine when a rational number is a solution to a problem.</p> <p>Identify real-world problems involving rational numbers.</p> <p>Identify real-world problems involving rational numbers.</p>
2. Measurement	<p>Identify the area and perimeter of triangles and rectangles.</p> <p>Identify the area and perimeter of triangles and rectangles.</p> <p>Identify the area and perimeter of triangles and rectangles.</p>	<p>Identify the area and perimeter of triangles and rectangles.</p> <p>Identify the area and perimeter of triangles and rectangles.</p> <p>Identify the area and perimeter of triangles and rectangles.</p>	<p>Identify the area and perimeter of triangles and rectangles.</p> <p>Identify the area and perimeter of triangles and rectangles.</p> <p>Identify the area and perimeter of triangles and rectangles.</p>	<p>Identify the area and perimeter of triangles and rectangles.</p> <p>Identify the area and perimeter of triangles and rectangles.</p> <p>Identify the area and perimeter of triangles and rectangles.</p>
3. Expression and Equations	<p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p>	<p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p>	<p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p>	<p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p>
4. Graphs and Functions	<p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p>	<p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p>	<p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p>	<p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p> <p>Identify the number properties including multiples and factors.</p>

- 2 Domains
- 92 Cells
- NRS Levels 1 – 6

- Reorganized PLD's
- 4 Domains
- 113 Cells
- Levels 1 – 4



INDIVIDUALIZED INSTRUCTIONAL STUDENT PLAN ABE Mathematics: TABE Level A

STUDENT NAME:

I.D.:

CURRENT TESTING INFORMATION:

Test Date:
Current Test Level:
Current Test Form:
Scale Score:
NRS Level:

POST-TESTING INFORMATION:

TABE Level: A
CCR Level: E

LOW EMPHASIS MEDIUM EMPHASIS HIGH EMPHASIS

DOMAIN: Geometry	SCORED PROFICIENCY:
15%	<input type="checkbox"/> Non-Proficiency <input type="checkbox"/> Partial Proficiency <input type="checkbox"/> Proficiency
MASTERY DATE:	

NRS	Group:	Standard Description:	Mastery Date:
5/6	GEOMETRY: CONGRUENCE	<i>Experiment with transformations in the plane.</i> Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.	
5/6	GEOMETRY: SIMILARITY, RIGHT TRIANGLES, & TRIGONOMETRY	<i>Prove theorems involving similarity.</i> Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	
5/6	GEOMETRY: GEOMETRIC MEASUREMENT & DIMENSION	<i>Explain volume formulas and use them to solve problems.</i> Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	
5/6	GEOMETRY: MODELING WITH GEOMETRY	<i>Apply geometric concepts in modeling situations.</i> Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).	

DOMAIN: Numbers & Quantity	SCORED PROFICIENCY:
13%	<input type="checkbox"/> Non-Proficiency <input type="checkbox"/> Partial Proficiency <input type="checkbox"/> Proficiency
MASTERY DATE:	

NRS	Group:	Standard Description:	Mastery Date:
5/6	NUMBER & QUANTITY: THE REAL NUMBER SYSTEM	<i>Extend the properties of exponents to rational exponents.</i> Rewrite expressions involving radicals and rational exponents using the properties of exponents.	
5/6	NUMBER & QUANTITY: QUANTITIES	<i>Reason quantitatively and use units to solve problems.</i> Use units as a way to understand problems and to guide the solution of multi-step problems. Choose and interpret units consistently in formulas. Choose and interpret the scale and the origin in graphs and data displays. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	

- Derived from TABE 11&12 Test and Blueprints
- Test Levels (E, M, D & A)
- Emphasis Level
- Domain Percentage
- Standard Group
- Checklist Format
- Live Document
- Promotes Student Buy-In



LOW EMPHASIS

MEDIUM EMPHASIS

HIGH EMPHASIS

DOMAIN: Numbers & Quantity
13%

SCORED PROFICIENCY:

☐ Non-Proficiency
☐ Partial Proficiency
☐ Proficiency

MASTERY DATE:

NRS	Group:	Standard Description:	Mastery Date:
5/6	NUMBER & QUANTITY: THE REAL NUMBER SYSTEM	<i>Extend the properties of exponents to rational exponents.</i> Rewrite expressions involving radicals and rational exponents using the properties of exponents.	
5/6	NUMBER & QUANTITY: QUANTITIES	<i>Reason quantitatively and use units to solve problems.</i> Use units as a way to understand problems and to guide the solution of multi-step problems.	03/01/2020
		Choose and interpret units consistently in formulas.	03/06/2020
		Choose and interpret the scale and the origin in graphs and data displays.	
		Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	



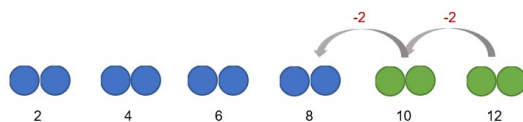
Equality in Addition and Subtraction

Content Area:	ABE Mathematics
Domain:	Operations and Algebraic Thinking
Standard:	CCR.MA.ABE.2.1.3 1.3 Add and subtract with 20. CCR.MA.ABE.2.1.4 Work with addition and subtraction equations.

Another quick strategy for addition and subtraction is using the relationship between the two. *Let's say, we start with a number, 16. What will happen when we add a number, like 3, and then, subtract the same number, 3, from the result?*

2 4 6 8 10

We can use the same strategy in subtraction, the only difference is that we are skip counting by 2's backwards. For example, we want to subtract $12 - 4$.



Highlights:

- Alignment to CCRS
- Alignment to Standardized Assessment
- Research Base
- Content Development
- Visual/Graphic Element
- Hands-On Approach
- Vocabulary Emphasis
- Reflective Prompts
- Developed by Florida Practitioners
- Simple yet versatile
- FREE and Reproducible



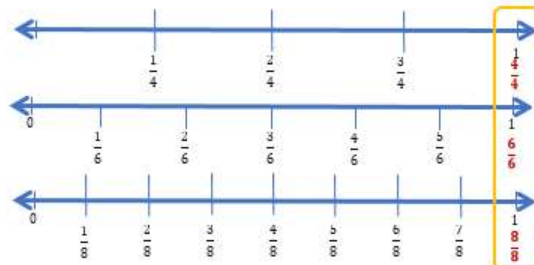
This time, let's closely examine fractions that equivalent to a whole. Looking at the fraction tiles below, we can generate some fractions that are equivalent to a whole.



We can say that the following examples form the same size as a whole and are fractions equivalent to a whole or 1.

- Two pieces of the $\frac{1}{2}$ fraction tiles which represents $\frac{2}{2}$
- Three pieces of the $\frac{1}{3}$ fraction tiles which represents $\frac{3}{3}$
- Four pieces of the $\frac{1}{4}$ fraction tiles which represents $\frac{4}{4}$
- Six pieces of the $\frac{1}{6}$ fraction tiles which represents $\frac{6}{6}$
- Eight pieces of the $\frac{1}{8}$ fraction tiles which represents $\frac{8}{8}$

Looking at a few number lines, we can also see the same pattern of fractions equivalent to 1.



Components:

- Concept
- Practice Activities
- Answer Key
- Additional Resources
- References/Credits



Reflection Prompts

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Activity Resource









NRS LEVEL 2

Identify Common Polygons and 3-Dimensional Figures

Content Area:	ABE Mathematics
Domain:	Geometry
Standard:	CCR.MA.ABE.4.2.1 Analyze and compare angles within shapes.

Concept:

In this activity resource, we will study different geometric figures in 2 dimensions. Any closed figure formed by straight lines of equal length is called a **regular polygon**. Polygons are either regular or irregular. **Irregular polygons** are closed geometric figures formed by straight lines with varying lengths. The table below gives you some examples of regular and irregular polygons.

Name of Polygon	Illustrated Example of Regular Polygon	Illustrated Example of Irregular Polygon
Triangle		
Quadrilateral		
Pentagon		
Hexagon		

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Exercises

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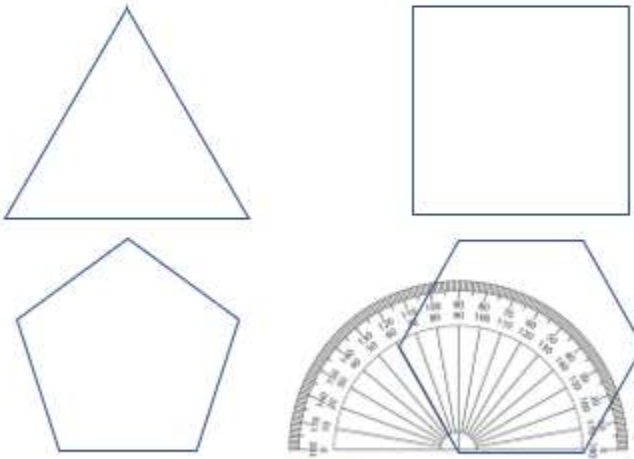
Polygons are classified according to attributes. Attributes are properties of geometric figures such as number of sides or faces, number of congruent sides or faces, alignment of sides or faces, number of angles, and number of congruent angles. When lines have the same length, they are called **congruent lines**. When angles have the same measurement, they are called **congruent angles**. We describe alignment of sides or faces as either parallel or perpendicular. When lines are extended on and on, and do not meet, they are called **parallel lines**. When lines are extended and form a 90° angle, they are called **perpendicular lines**. Below are examples of parallel and perpendicular lines.

Parallel Lines

Perpendicular Lines



Interior angles are the inside measurement of angles in a closed 2-dimensional geometric figure.



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Visual Element



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Practice: Activity Resource

- Wilson is 3 times as old as his baby brother Kevin. If Wilson is 12 years old, how old is Kevin?
A. 3 years old
B. 4 years old
C. 12 years old
D. 36 years old
- After a full day's work, 6 servers divided the total tips equally with each other. Each server received \$24.00. Write an equation to solve for the total amount of tips.
A. $6m = 24$
B. $m + 6 = 24$
C. $6 \div m = 24$
D. $6 + m = 24$
- Use algebra tiles to solve the equation: $4x = 12$. Draw the steps on the equation mats below.

=

=

- Louie has one week (7 days) to complete his construction project. If it took him 8 hours each day to complete the project, how many total hours did the project took to complete? Enter your response in the gridded area.

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

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Highlights:

- Alignment to CCRS
- Alignment to Standardized Assessments
 - Real-Life Word Problems
 - Standard Item Types
 - Standard Item Format
 - Graphs and Illustrations
 - Technology Enhanced Capabilities

I. Curriculum Development

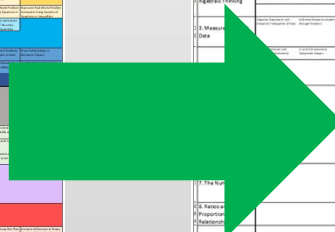
Domain	NRS Level 1	
1. Number and Operations: Base Ten	Place Value of 2-Digit Numbers	Add and Subtract 2-Digit Numbers
	Compare 2-Digit Numbers	Model Addition and Subtraction of 2-Digit Numbers
2. Operations and Algebraic Thinking	Solve Addition and Subtraction Problems within 20	The Equal Sign
	Commutative and Associative Property of Addition	Solving Addition and Subtraction Equations

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Operations and Equations					
7. The Number System					
8. Reason and Proportional Relationships					
9. Statistics and Probability					
10. Functions					

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Operations and Equations					
7. The Number System					
8. Reason and Proportional Relationships					
9. Statistics and Probability					
10. Functions					

II. Pacing Guide

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Geometry and Measurement					
4. Operations					
5. Number and Operations: Fractions					
6. Equations and Inequalities					
7. The Number System					
8. Statistics and Probability					
9. Geometry and Measurement					
10. Functions					



Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking		Aug. 8-11	Aug. 21-25		
3. Geometry and Measurement		Aug. 15-18	Sept. 15-19		
4. Operations		Sept. 7-12	Sept. 22-26		
5. Number and Operations: Fractions			Oct. 1-4		
6. Equations and Inequalities					
7. The Number System					
8. Statistics and Probability					
9. Geometry and Measurement					
10. Functions					

III. Resource Guide

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Ratios and Proportional Relationships					
7. The Number System					
8. Expressions and Equations					
9. Statistics and Probability					
10. Functions					

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Activity Resource

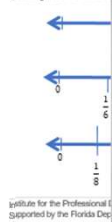
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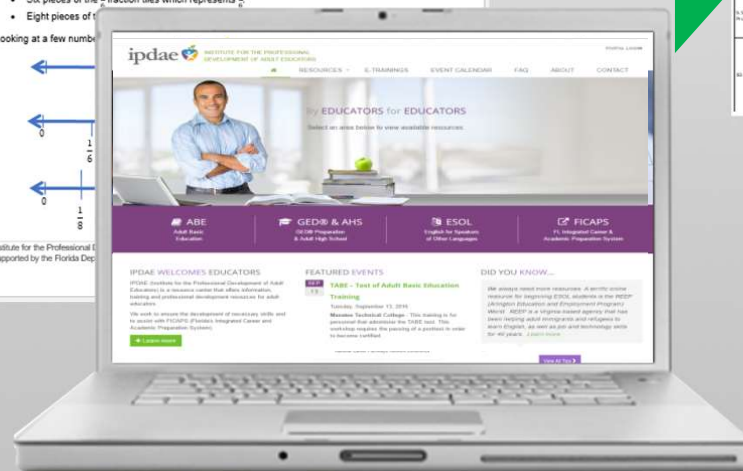
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- Four pieces of the $\frac{1}{4}$ fraction tiles which represents $\frac{4}{4}$
- Six pieces of the $\frac{1}{6}$ fraction tiles which represents $\frac{6}{6}$
- Eight pieces of the $\frac{1}{8}$ fraction tiles which represents $\frac{8}{8}$

looking at a few numbers



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Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Ratios and Proportional Relationships					
7. The Number System					
8. Expressions and Equations					
9. Statistics and Probability					
10. Functions					

Multiplication Table

Worksheet 10.1

P. 24-28

MathDude.com

Fraction Tiles

Geoboards

KhanAcademy.com

P. 47-59

PurpleMath.com

Worksheet 12.5

IXL.com

Scale Drawings & Floor Plans

Algebra Tiles

P. 65-75

Worksheet 20.4

IV. Targeting Instruction



Individual Profile: STUDENT, SAMPLE

Report Criteria

ID: 12345
Test Name: TABE 11 ALL
Report: ALL
Report Date: 10-18-2019

State: SAMPLE DISTRICT
School: SAMPLE SCHOOL

FORM	DOMAIN	PERFORMANCE	DEMONSTRATED SKILLS	AREAS FOR NEXT FOCUS
M	Language	Partial Proficiency	<ul style="list-style-type: none"> Use more complex commonly confused words Combine longer simple sentences using coordinating conjunctions Use conventional adjective order in more complex sentences Identify prepositional phrases Recognize a sentence fragment within a paragraph Use commas with introductory prepositional phrases Identify a sentence with a comma error Use correct capitalization in common nouns when used as proper nouns 	<ul style="list-style-type: none"> Recognize multiple sentence fragments within a paragraph Use italics for book titles Identify multiple sentences with comma errors Use conventional adjective order across multiple sentences

Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Expressions and Equations					
7. The Number System					
8. Statistics and Probability					

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INDIVIDUALIZED INSTRUCTIONAL STUDENT PLAN
ABE Mathematics: TABE Level A

STUDENT NAME: I.D.:

CURRENT TESTING INFORMATION: Test Date: TABE Level: A
Current Test Level: COT Level: E
Scale Score: NRS Level:

POST-TESTING INFORMATION: TABE Level: A
COT Level: E

LOW PROFICIENCY MASTERY DATE: HIGH PROFICIENCY

DOMAIN: Geometry 15% SCORED PROFICIENCY: ☐ Non-Proficiency ☐ Partial Proficiency ☐ Proficiency MASTERY DATE:

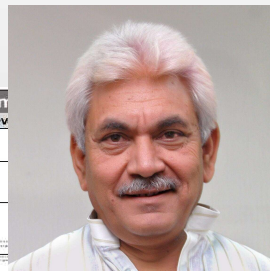
NRS	Group	Standard Description	Mastery Date
5/6	GEOMETRY: CONGRUENCE	Experiment with transformations on the plane. Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. Prove theorems involving congruence.	01/11/2020
5/6	GEOMETRY: SIMILARITY, RIGHT TRIANGLES, & TRIGONOMETRY	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	
5/6	GEOMETRY: GEOMETRIC MEASUREMENT & DIMENSION	Explore volume formulas and use them to solve problems. Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	03/15/2020
5/6	GEOMETRY: MODELING WITH GEOMETRY	Apply geometric concepts in modeling situations. Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, 9000 per cubic foot).	03/21/2020

DOMAIN: Numbers & Quantity 25% SCORED PROFICIENCY: ☐ Non-Proficiency ☐ Partial Proficiency ☐ Proficiency MASTERY DATE:

NRS	Group	Standard Description	Mastery Date
5/6	NUMBERS & QUANTITY: THE REAL-NUMBER SYSTEM	Extend the properties of exponents to rational exponents. Perform operations involving radicals and rational exponents using the properties of exponents. Reason quantitatively and use units to solve problems.	03/01/2020
5/6	NUMBERS & QUANTITY: QUANTITIES	Use units as a way to understand problems and to guide the solution of multi-step problems. Choose and interpret units consistently in formulas. Choose and interpret the scale and the origin in graphs and data displays. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	03/06/2020

- Creating Individual or Group Profiles

Adult Basic Education Mathematics Curriculum				
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4
1. Number and Operations: Base Ten				
2. Operations and Algebraic Thinking				
3. Measurement and Data				
4. Geometry				
5. Number and Operations: Fractions				
6. Expression and Equations				
7. The Number System				
8. Reason and Proportional Relationships				
9. Statistics and Probability				
10. Functions				



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INDIVIDUALIZED INSTRUCTIONAL STUDENT I
ABE Mathematics: TABE Level A

STUDENT NAME: I.D.:

CURRENT TESTING INFORMATION: Test Date: Current Test Level: Current Test Score: Scale Score: NRS Level:

POST-TESTING INFORMATION: Test Level: A: CSD Level: E

SCORED PROFICIENCY: ☐ Non-Proficiency ☐ Partial Proficiency ☐ Proficiency

MASTERY DATE:

NRS	Group	Standard Description	Mastery Date
US	GEOMETRY: CONGRUENCE	Experiment with transformations in the plane. Know precise definitions of angle, circle, perpendicular line, parallel line, and two segments, based on the undistorted outcomes of point, line, distance along a line, and distance around a circle arc.	03/11/2020
US	GEOMETRY: SIMILARITY, RIGHT TRIANGLES, & TRIGONOMETRY	Prove theorems involving similarity. Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	
US	GEOMETRY: GEOMETRIC MEASUREMENT & DIMENSION	Explore volume formulas for cylinders, pyramids, cones, and spheres to solve problems. Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	03/15/2020
US	GEOMETRY: MODELING WITH GEOMETRY	Apply geometric concepts in modeling situations. Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).	03/21/2020

DOMAIN: Numbers & Quantity 18%

SCORED PROFICIENCY: ☐ Non-Proficiency ☐ Partial Proficiency ☐ Proficiency

MASTERY DATE:

NRS	Group	Standard Description	Mastery Date
US	NUMBERS & QUANTITY: THE REAL NUMBERS	Extend the properties of exponents to rational exponents. Rewrite expressions involving radicals and rational exponents using the properties of exponents.	
US	NUMBERS & QUANTITY: QUANTITIES	Reason quantitatively and use units to solve problems. Use units as a way to understand problems and to guide the solution of multi-step problems. Choose and interpret units consistently in formulas. Choose and interpret the scale and the origin in graphs and data displays. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	03/01/2020 03/06/2020



Adult Basic Education Mathematics Curriculum				
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4
1. Number and Operations: Base Ten				
2. Operations and Algebraic Thinking				
3. Measurement and Data				
4. Geometry				
5. Number and Operations: Fractions				
6. Expression and Equations				
7. The Number System				
8. Reason and Proportional Relationships				
9. Statistics and Probability				
10. Functions				



- Data Chats with Student(s) or PLC Group

Adult Basic Education Mathematics Curriculum

Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Lev
1. Number and Quantity				
2. Algebra and Functions				
3. Geometry and Measurement				
4. Statistics				

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INDIVIDUALIZED INSTRUCTIONAL STUDENT
ABE Mathematics: TABE Level A

STUDENT NAME: I.D.:

CURRENT TESTING INFORMATION: Test Score: 1000 Level: 2

POST-TESTING INFORMATION: Test Score: 1000 Level: 2

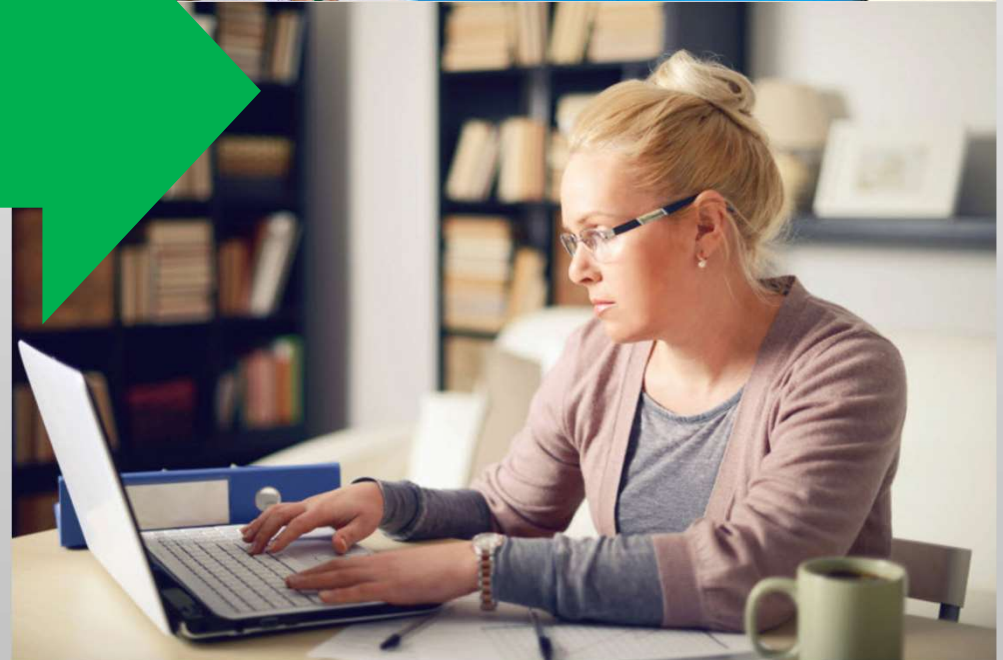
Domain: Geometry

Standard Description: This standard describes the skills, knowledge, and abilities that students should have when they enter the workforce. It is based on the standards for the field of mathematics and is designed to be used as a guide for instruction.

Adult Basic Education Mathematics Curriculum



- Guiding Professional Learning



- Tailoring Content, Resources and Activities

Adult Basic Education Mathematics Curriculum

Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Quantity					
2. Algebra and Functions					
3. Geometry and Measurement					
4. Data Analysis and Probability					

Individualized Instructional Student
ABE Mathematics: TABE Level A

Adult Basic Education Mathematics Curriculum Matrix

Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Quantity					
2. Algebra and Functions					
3. Geometry and Measurement					
4. Data Analysis and Probability					

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newsela

ReadWorks.org

Purplemath

Adult Basic Education Mathematics Curriculum Matrix

Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Quantity					
2. Algebra and Functions					
3. Geometry and Measurement					
4. Data Analysis and Probability					

Worksheet 10.1
P. 24-28

Multiplication Table
MathDude.com

Fraction Tiles
KhanAcademy.com
PurpleMath.com
IXL.com

Geoboards
P. 47-59

Worksheet 12.5
Scale Drawings & Floor Plans
Algebra Tiles
P. 65-75

Worksheet 28.4

V. Lesson Planning

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten		Aug. 8-11			
2. Operations and Algebraic Thinking		Aug. 15-18	Aug. 21-25		
3. Measurement and Data					

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
4. Geometry					
5. Number and Operations: Fractions					
6. Expressions and Equations					
7. The Number System					
8. Functions					

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
9. Statistics and Probability					
10. Functions					

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INDIVIDUALIZED INST
ABE Mathner

STUDENT NAME:

CURRENT TESTING INFORMATION:

Test Date:
Current Test Score:
Scale Score:
NRS Level:

DOMAIN: Geometry
15%

NRS	Group	Expectations with Instruction
S/S	GEOMETRY: CONGRUENCE	Explain with illustrations how precise definitions of an segment, based on the equality of distance around a circle, are used to prove theorems involving congruence and similarity.
S/S	GEOMETRY: SIMILARITY, RIGHT TRIANGLES & TRIGONOMETRY	Explain with illustrations how precise definitions of an segment, based on the equality of distance around a circle, are used to prove theorems involving congruence and similarity.
S/S	GEOMETRY: MEASUREMENT & DIMENSION	Explain with illustrations how precise definitions of an segment, based on the equality of distance around a circle, are used to prove theorems involving congruence and similarity.
S/S	GEOMETRY: GEOMETRY: MEASUREMENT & DIMENSION	Explain with illustrations how precise definitions of an segment, based on the equality of distance around a circle, are used to prove theorems involving congruence and similarity.

DOMAIN: Numbers & Quantity
23%

NRS	Group	Expectations with Instruction
S/S	NUMBERS & QUANTITY: THE REAL NUMBER SYSTEM	Explain with illustrations how precise definitions of an segment, based on the equality of distance around a circle, are used to prove theorems involving congruence and similarity.
S/S	NUMBERS & QUANTITY: QUANTITIES	Explain with illustrations how precise definitions of an segment, based on the equality of distance around a circle, are used to prove theorems involving congruence and similarity.

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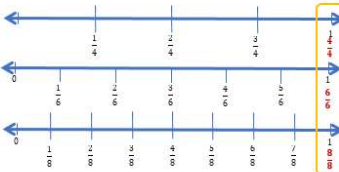
This time, let's closely examine fractions that are equivalent to a whole. Looking at the fraction tiles below, we can generate some fractions that are equivalent to a whole.



We can say that the following examples form the same size as a whole and are fractions equivalent to a whole or 1.

- Two pieces of the $\frac{1}{2}$ fraction tiles which represents $\frac{2}{2}$
- Three pieces of the $\frac{1}{3}$ fraction tiles which represents $\frac{3}{3}$
- Four pieces of the $\frac{1}{4}$ fraction tiles which represents $\frac{4}{4}$
- Six pieces of the $\frac{1}{6}$ fraction tiles which represents $\frac{6}{6}$
- Eight pieces of the $\frac{1}{8}$ fraction tiles which represents $\frac{8}{8}$

Looking at a few number lines, we can also see the same pattern of fractions equivalent to 1.



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LESSON PLAN TEMPLATE

LESSON PLAN Ref: Course Ref:

Subject / Course:

Topic:

Lesson Title:

Level: Lesson Duration:

Lesson Objectives:

Summary of Tasks / Actions:

Materials / Equipment:

References:

Take Home Tasks:

www.class-templates.com/printable-lesson-plan-template.html Template last amended: 03/03/2010 Amended by: Chris / class-templates.com

VI. Differentiating Instruction and Grouping

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Ratios and Proportional Relationships					
7. The Number System					
8. Functions					

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Ratios and Proportional Relationships					
7. The Number System					
8. Functions					

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INDIVIDUALIZED INSTRUCTIONAL STUDENT PLAN
ABE Mathematics: TABE Level A

STUDENT NAME: _____ I.D.: _____

CURRENT TESTING INFORMATION: _____ POST-TESTING INFORMATION: _____

Test Date: _____ Test Level: _____
Current Test Score: _____ CEF Level: _____
Scale Score: _____ NRS Level: _____

SCORED PROFICIENCY: ☐ Non-Proficiency ☐ Partial Proficiency ☐ Proficiency

MASTERY DATE: _____

Unit	Group	Standard Description	Mastery Date
1/1	GEOMETRY: CONGRUENCE	Experiment with transformations of the plane. Review precise definitions of angle, circle, perpendicular line, parallel line, and line segments, based on the undistorted motion of rigid figures: translation, rotation, and reflection. Prove theorems involving congruence.	01/11/2020
1/2	GEOMETRY: SIMILARITY, RIGHT TRIANGLES, & TRIGONOMETRY	Use trigonometric relationships to solve problems and to prove relationships in geometric figures.	
1/3	GEOMETRY: GEOMETRIC MEASUREMENT & DIMENSION	Explore volume formulas and use them to solve problems. Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	03/15/2020
1/4	GEOMETRY: MODELING WITH GEOMETRY	Apply geometric concepts in modeling situations. Apply concepts of density based on area and volume in modeling situations (e.g., percent per square mile, BTU per cubic foot).	03/21/2020

DOMAIN: Numbers & Quantity 1.1N

SCORED PROFICIENCY: ☐ Non-Proficiency ☐ Partial Proficiency ☐ Proficiency

MASTERY DATE: _____

Unit	Group	Standard Description	Mastery Date
1/1	NUMBERS & QUANTITY: THE REAL NUMBER SYSTEM	Extend the properties of exponents to rational exponents. Use the properties of integer exponents to generate equivalent numerical expressions using the properties of exponents.	
1/2	NUMBERS & QUANTITY: QUANTITIES	Use units as a way to understand problems and to guide the solution of multi-step problems. Choose and interpret units consistently in formulas. Choose and interpret the scale and the origin in graphs and data displays. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	03/01/2020 03/06/2020

LESSON PLAN TEMPLATE

Lesson Plan Ref: _____ Course Ref: _____

Subject / Course: _____

Topic: _____

Lesson Title: _____

Level: _____ Lesson Duration: _____

Lesson Objectives: _____

Resident district: _____ Date of last comprehensive evaluation: _____

Annual IEP meeting date: _____

INDIVIDUALIZED EDUCATION PROGRAM (IEP)

Summary of Test: _____

Child's name: _____ Parent/guardian name(s): _____

MARSS ID#: _____

Gender: ☐ M ☐ F Relationship to child: _____

Date of birth: _____ Address: _____

School: _____ Phone (day/evening): _____

Grade: _____ Phone (cell): _____

Providing District (Name/number): _____ Email: _____

School address (provide mailing address and street address if different): _____

References: _____

IEP INFORMATION

Type of IEP: ☐ Initial placement ☐ Annual ☐ Interim ☐ Federal setting

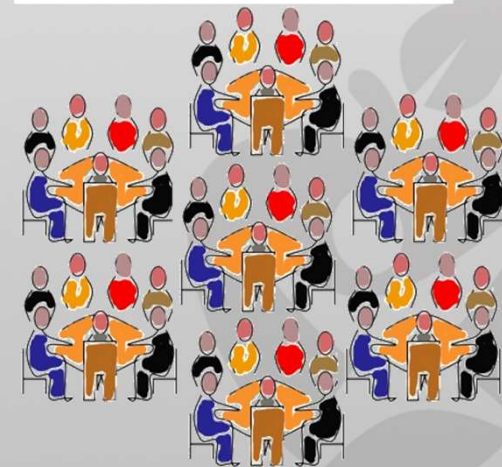
IEP manager name: _____

Phone/email: _____

Take Home Test: _____

Primary disability: _____ Secondary disability: _____

www.ipdae.org/ipdae-compliance/ipdae-compliance-2019-2020



- Grouping by Ability, Achievement or Learning Style

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Expressions and Equations					

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Expressions and Equations					
7. The Number System					
8. Functions					

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INDIVIDUALIZED INSTRUCTIONAL STUDENT PLAN
ABE Mathematics: TABE Level A

STUDENT NAME: _____ I.D.: _____

CURRENT TESTING INFORMATION: POST-TESTING INFORMATION:
 Test Date: _____ Test Level: A
 Current Test Score: _____ CEF Level: E
 Scale Score: _____ NRS Level: _____

SCORED PROFICIENCY: ☐ Non-Proficiency ☐ Partial Proficiency ☐ Proficiency

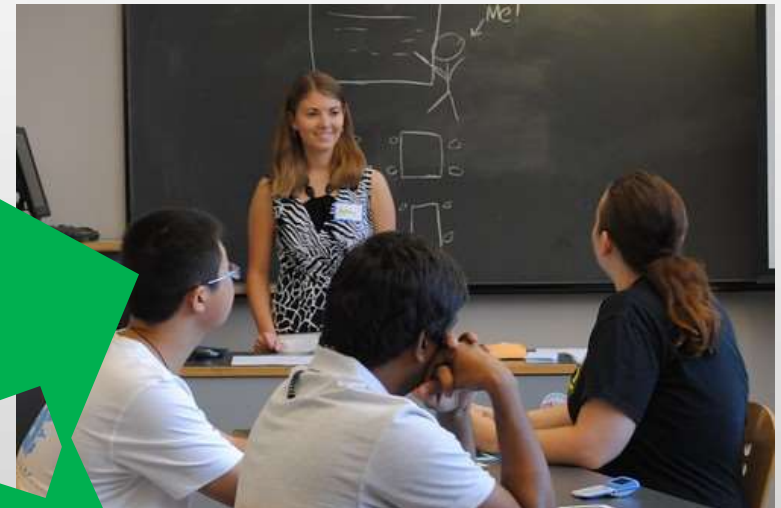
MASTERY DATE: _____

NRS	Group	Standard Description	Mastery Date
5/6	GEOMETRY: CONGRUENCE	Experiment with transformations of the plane. Know precise definitions of angle, circle, perpendicular line, parallel line, and line segments, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.	03/11/2020
5/6	GEOMETRY: SIMILARITY, RIGHT TRIANGLES, & TRIGONOMETRY	Prove theorems involving similarity. Use trigonometric and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	
5/6	GEOMETRY: GEOMETRIC MEASUREMENT & DIMENSION	Explore volume formulas and use them to solve problems. Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	03/15/2020
5/6	GEOMETRY: MODELING WITH GEOMETRY	Apply geometric concepts in modeling situations. Apply concepts of density based on area and volume in modeling situations (e.g., percent per square mile, BTU per cubic foot).	03/21/2020

DOMAIN: Numbers & Quantity 3/6 SCORED PROFICIENCY: ☐ Non-Proficiency ☐ Partial Proficiency ☐ Proficiency

MASTERY DATE: _____

NRS	Group	Standard Description	Mastery Date
5/6	NUMBERS & QUANTITY: THE REAL NUMBER SYSTEM	Extend the properties of exponents to rational exponents. Represent real numbers using the properties of exponents. Reason quantitatively and use units to solve problems.	
5/6	NUMBERS & QUANTITY: QUANTITIES	Use units as a way to understand problems and to guide the solution of multistep problems. Choose and interpret units consistently in formulas. Choose and interpret the scale and the origin in graphs and data displays. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	03/01/2020 03/06/2020



- Complements Other Differentiation Techniques

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Expression and Equations					

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Expression and Equations					

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INDIVIDUALIZED I
ABE Mat

STUDENT NAME:

CURRENT TESTING INFORMATION:

Test Date:
Current Test Level:
Current Test Score:
NRS Level:

LONG RESPONSE:

DOMAIN: Geometry

13%

NRS Group:

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Activity Resource

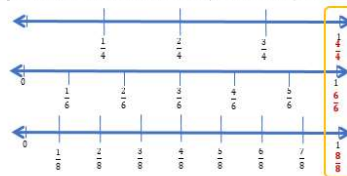
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- Four pieces of the $\frac{1}{4}$ fraction tiles which represents $\frac{4}{4}$
- Six pieces of the $\frac{1}{6}$ fraction tiles which represents $\frac{6}{6}$
- Eight pieces of the $\frac{1}{8}$ fraction tiles which represents $\frac{8}{8}$

Looking at a few number lines, we can also see the same pattern of fractions equivalent to 1.



VII. Designing and Managing Self-Paced or Individualized Learning

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Numeration Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Expressions and Equations					
7. The Number System					
8. Functions					

Worksheet 10.1

Multiplication Table
MathDude.com

Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Numeration Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Expressions and Equations					
7. The Number System					
8. Functions					

INDIVIDUALIZED INSTRUCTIONAL STUDENT PLAN ABE Mathematics: TABE Level A

STUDENT NAME:

CURRENT TESTING INFORMATION:

Test Date:
Current Test Level:
Current Test Score:
Scale Score:
NRS Level:

NEW DOMAINS:

DOMAIN: Geometry
25%

NRS Group:

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Adult Basic Education Mathematics Curriculum Matrix						
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6	
1. Number and Numerical Base Ten	1.1 Addition and Subtraction 1.2 Multiplication and Division 1.3 Fractions and Decimals	1.1 Addition and Subtraction 1.2 Multiplication and Division 1.3 Fractions and Decimals	1.1 Addition and Subtraction 1.2 Multiplication and Division 1.3 Fractions and Decimals	1.1 Addition and Subtraction 1.2 Multiplication and Division 1.3 Fractions and Decimals	1.1 Addition and Subtraction 1.2 Multiplication and Division 1.3 Fractions and Decimals	
2. Operations and Algebraic Thinking	2.1 Order of Operations 2.2 Properties of Operations 2.3 Patterns and Relationships	2.1 Order of Operations 2.2 Properties of Operations 2.3 Patterns and Relationships	2.1 Order of Operations 2.2 Properties of Operations 2.3 Patterns and Relationships	2.1 Order of Operations 2.2 Properties of Operations 2.3 Patterns and Relationships	2.1 Order of Operations 2.2 Properties of Operations 2.3 Patterns and Relationships	
3. Measurement and Data	3.1 Length, Area, Volume, Mass, Time, Temperature 3.2 Capacity, Weight, Distance, Speed, Acceleration	3.1 Length, Area, Volume, Mass, Time, Temperature 3.2 Capacity, Weight, Distance, Speed, Acceleration	3.1 Length, Area, Volume, Mass, Time, Temperature 3.2 Capacity, Weight, Distance, Speed, Acceleration	3.1 Length, Area, Volume, Mass, Time, Temperature 3.2 Capacity, Weight, Distance, Speed, Acceleration	3.1 Length, Area, Volume, Mass, Time, Temperature 3.2 Capacity, Weight, Distance, Speed, Acceleration	
4. Geometry	4.1 Points, Lines, Rays, Angles 4.2 Shapes and Solids	4.1 Points, Lines, Rays, Angles 4.2 Shapes and Solids	4.1 Points, Lines, Rays, Angles 4.2 Shapes and Solids	4.1 Points, Lines, Rays, Angles 4.2 Shapes and Solids	4.1 Points, Lines, Rays, Angles 4.2 Shapes and Solids	
5. Number and Numerical Operations	5.1 Addition and Subtraction 5.2 Multiplication and Division	5.1 Addition and Subtraction 5.2 Multiplication and Division	5.1 Addition and Subtraction 5.2 Multiplication and Division	5.1 Addition and Subtraction 5.2 Multiplication and Division	5.1 Addition and Subtraction 5.2 Multiplication and Division	
6. Expressions and Equations	6.1 Variables and Constants 6.2 Arithmetic Sequences	6.1 Variables and Constants 6.2 Arithmetic Sequences	6.1 Variables and Constants 6.2 Arithmetic Sequences	6.1 Variables and Constants 6.2 Arithmetic Sequences	6.1 Variables and Constants 6.2 Arithmetic Sequences	
7. The Number Line	7.1 Positive and Negative Numbers 7.2 Addition and Subtraction	7.1 Positive and Negative Numbers 7.2 Addition and Subtraction	7.1 Positive and Negative Numbers 7.2 Addition and Subtraction	7.1 Positive and Negative Numbers 7.2 Addition and Subtraction	7.1 Positive and Negative Numbers 7.2 Addition and Subtraction	
8. Factors and Multiples	8.1 Prime and Composite Numbers 8.2 Least Common Multiple	8.1 Prime and Composite Numbers 8.2 Least Common Multiple	8.1 Prime and Composite Numbers 8.2 Least Common Multiple	8.1 Prime and Composite Numbers 8.2 Least Common Multiple	8.1 Prime and Composite Numbers 8.2 Least Common Multiple	
9. Squares and Rectangles	9.1 Perimeter and Area 9.2 Volume and Surface Area	9.1 Perimeter and Area 9.2 Volume and Surface Area	9.1 Perimeter and Area 9.2 Volume and Surface Area	9.1 Perimeter and Area 9.2 Volume and Surface Area	9.1 Perimeter and Area 9.2 Volume and Surface Area	
10. Functions						

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Practice:  INSTITUTE FOR THE PROFESSIONAL
DEVELOPMENT OF ADULT EDUCATORS

Activity Resource

- Wilson is 3 times as old as his baby brother Kevin. If Wilson is 12 years old, how old is Kevin?
 - 3 years old
 - 4 years old
 - 12 years old
 - 36 years old
- After a full day's work, 6 servers divided the total tips equally with each other. Each server received \$24.00. Write an equation to solve for the total amount of tips.
 - $6m = 24$
 - $m + 6 = 24$
 - $6 \div m = 24$
 - $6 \times m = 24$
- Use algebra tiles to solve the equation: $4x + 12$. Draw the steps on the equation mat.

	=	
	=	

- Louie has one week (7 days) to complete his construction project. If it took him 8 hours each day to complete the project, how many total hours did the project took to complete? Enter your response in the gridded area.

7	7	7	7	7	7	7	7	7	7
6	6	6	6	6	6	6	6	6	6
5	5	5	5	5	5	5	5	5	5
4	4	4	4	4	4	4	4	4	4
3	3	3	3	3	3	3	3	3	3
2	2	2	2	2	2	2	2	2	2
1	1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0	0

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Adult Basic Education Mathematics Curriculum Matrix					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Numerical Operations and Concepts	<div>1.1 Addition and Subtraction of Whole Numbers</div> <div>1.2 Multiplication and Division of Whole Numbers</div> <div>1.3 Fractions and Decimals</div>	<div>2.1 Addition and Subtraction of Integers</div> <div>2.2 Multiplication and Division of Integers</div> <div>2.3 Fractions and Decimals</div>	<div>3.1 Addition and Subtraction of Integers</div> <div>3.2 Multiplication and Division of Integers</div> <div>3.3 Fractions and Decimals</div>		<div>4.1 Addition and Subtraction of Integers</div> <div>4.2 Multiplication and Division of Integers</div> <div>4.3 Fractions and Decimals</div>
2. Operations and Algebraic Thinking	<div>2.1 Operations with Whole Numbers</div> <div>2.2 Operations with Integers</div> <div>2.3 Operations with Fractions and Decimals</div>	<div>2.1 Operations with Integers</div> <div>2.2 Operations with Fractions and Decimals</div> <div>2.3 Operations with Algebraic Expressions</div>	<div>3.1 Operations with Integers</div> <div>3.2 Operations with Fractions and Decimals</div> <div>3.3 Operations with Algebraic Expressions</div>		<div>4.1 Operations with Integers</div> <div>4.2 Operations with Fractions and Decimals</div> <div>4.3 Operations with Algebraic Expressions</div>
3. Measurement and Data	<div>3.1 Measurement of Length, Mass, and Volume</div> <div>3.2 Measurement of Time</div> <div>3.3 Data Representation</div>	<div>3.1 Measurement of Length, Mass, and Volume</div> <div>3.2 Measurement of Time</div> <div>3.3 Data Representation</div>	<div>3.1 Measurement of Length, Mass, and Volume</div> <div>3.2 Measurement of Time</div> <div>3.3 Data Representation</div>	<div>4.1 Measurement of Length, Mass, and Volume</div> <div>4.2 Measurement of Time</div> <div>4.3 Data Representation</div>	<div>5.1 Measurement of Length, Mass, and Volume</div> <div>5.2 Measurement of Time</div> <div>5.3 Data Representation</div>
4. Geometry and Measurement	<div>4.1 Area and Perimeter</div> <div>4.2 Volume and Surface Area</div>	<div>4.1 Area and Perimeter</div> <div>4.2 Volume and Surface Area</div>	<div>4.1 Area and Perimeter</div> <div>4.2 Volume and Surface Area</div>	<div>4.1 Area and Perimeter</div> <div>4.2 Volume and Surface Area</div>	<div>4.1 Area and Perimeter</div> <div>4.2 Volume and Surface Area</div>
5. Probability and Statistics	<div>5.1 Probability</div> <div>5.2 Statistics</div>	<div>5.1 Probability</div> <div>5.2 Statistics</div>	<div>5.1 Probability</div> <div>5.2 Statistics</div>	<div>5.1 Probability</div> <div>5.2 Statistics</div>	<div>5.1 Probability</div> <div>5.2 Statistics</div>



AMERICAN EDUCATION CENTER
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INDIVIDUAL INSTRUCTIONAL STUDENT PLAN

ABE Mathematics: TABE Level A

STUDENT NAME: _____

I.D.: _____

DATE: _____

CURRENT TESTING INFORMATION:

Test Date: _____

Current Test Level: _____

Current Test Form: _____

Scale Score: _____

MSL Level: _____

POST-TESTING INFORMATION:

TabE Level: _____

CDL Level: _____

LOW EMPHASIS

MODERATE EMPHASIS

HIGH EMPHASIS

DOMAIN		SCORING PROFICIENCY:
GEOMETRY	15%	<input type="checkbox"/> Non-Proficiency <input type="checkbox"/> Partial Proficiency <input type="checkbox"/> Proficiency

MASTERY DATE: _____


MIS	Group	Standard Description:	Mastery Date:
1/S	GEOMETRY: CONGRUENCE	Experiment with transformations to identify rigid motions that preserve length and angle. Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undeformed notions of point, line, distance along a line, and distance around a circle arc. Prove theorems involving congruence.	03/11/2020
1/S	GEOMETRY: SIMILARITY, RIGHT TRIANGLES & TRIGONOMETRY	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	
1/S	GEOMETRY: GEOMETRIC MEASUREMENT & DIMENSION	Exploit volume formulas and use them to solve problems. Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	03/15/2020
1/S	GEOMETRY: MODELING WITH GEOMETRY	Apply geometric concepts in modeling situations. Apply concepts of density based on area and volume in modeling situations (e.g., percent per square mile, 0.05% per cubic inch).	03/21/2020

DOMAIN		SCORING PROFICIENCY:
NUMBERS & QUANTITY	15%	<input type="checkbox"/> Non-Proficiency <input type="checkbox"/> Partial Proficiency <input type="checkbox"/> Proficiency

MASTERY DATE: _____

MIS	Group	Standard Description:	Mastery Date:
1/S	NUMBERS & QUANTITY: THE REAL NUMBER SYSTEM	Extend the properties of exponents to rational exponents. Represent operations involving radicals and rational exponents using the properties of exponents.	
1/S	NUMBERS & QUANTITY: QUANTITIES	Reason quantitatively and use units to solve problems. Use units as a way to understand problems and guide the solution of multi-step problems. Choose and interpret units consistently in formulas. Choose and interpret the scale and the origin in graphs and data displays. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	03/01/2020 02/06/2020

Level E



Level M

Level D

Level A

Levels

<p>  </p>	<p>  </p>	<p>  </p>
<p>  </p>	<p>  </p>	<p>  </p>



3. Measurement and Data	Represent data given, objects through illustrations	Lengths and the angles
		Represent 2D-shapes, 3D-shapes and a combination
	Area, Perimeter, and	2-D and 3-Dimensional
		Volume, Area and Perimeter

S. Number and Operations: Fractions	Represent fractions with denominators 1, 2, 3, 4, 6, or 8 on a number line
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7. The Number System		
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9. Statistics and Probability		
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10. Functions		
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	2	2	2	
6	6	6	6	6
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

VII. IET, Post Secondary Career Technical Programs and Career Pathways

CTE Overlay (Licensed Practical Nursing)					
Domain	NRS Level 1	NRS Level 2	NRS Level 3	NRS Level 4	NRS Level 5/6
1. Number and Operations: Base Ten					
2. Operations and Algebraic Thinking					
3. Measurement and Data					
4. Geometry					
5. Number and Operations: Fractions					
6. Expressions and Equations					
7. The Number System					
8. Statistics					

ABE Mathematics Crosswalk to GED Matrix				
ABE Domains	NRS Level 5/6		Major Works	Area
Number and Operations: Base Ten				1. Rational Numbers
Number and Operations: Fractions				
Ratios and Proportional Relationships				
Geometry				2. Measurement
Number and Quantity				
Statistics and Probability				
The Real Number System				3. Expression and Equations
Algebra				
Functions				





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participation!**

