Teacher: Rachel Wraley Lesson # in unit: 1/3 Subject/Course Title: Algebra Repeat Date: Measurable Lesson Objectives and Assessment of the objectives By the end of the class session, student will be able to: Tell me the names of at least 5 of their peers. **Content Objectives:** They will be able to solve a linear equation given real-life applications. **Academic Language Objectives:** Important vocabulary: Linear, Equation, Inequality, and solution Why does this lesson matter? This lesson will help the students get to know their peers. Assessment Statement: How will students show they have met the objective? They will be able to give me the names of at least 5 of their peers. Specific Standard Indicators Aligned with this Lesson: AI.L.1: Understand that the steps taken when solving linear equations create new equations that have the same solution as the original. Solve fluently linear equations and inequalities in one variable with integers, fractions, and decimals as coefficients. Explain and justify each step in solving an equation, starting from the assumption that the original equation has a solution. Justify the choice of a solution method. **Supporting Diverse Learners** Method(s) for Instruction **Grouping Strategies:** Teacher Modeling/Demo. Class/Group Discussion Journal writing Cooperative Learning Role Play Small Group Hands-on Guided Practice **Inquiry Learning** Lab Game Lecture or Direct Instruction Simulation/Role Playing Question/Answer Independent Learning Learning Stations Other Readers/Writers Workshop

## **Lesson Agenda**

Warm up: How will you support students in accessing prior knowledge, personal, real world and/or cultural connections?

On a table at the front of the classroom there will be two stacks of papers. One will be the paper for Getting to Know You Bingo<sup>1</sup>, and the other is an information sheet. As they walk in hopefully the students will pick them up. During the opening of class I will tell them that they should always check that table for any important papers for the day.

Time	Teacher Will Be:	<b>Students Will Be:</b>	Rationale:

1 10 ' '	A.C 41 - 1 - 11 - 1 T 11	T !	T
1-10 minutes Welcome/Bellwork	After the bell rings I will welcome the students to my classroom. I will ask them if everyone picked up a paper from the table by the door, pass out any papers as is needed. At this moment I will tell them that any and all important papers for the day's lesson and/or activity will be on that table, and to check it every day as they walk into the classroom.  Then I will introduce the day's Bellwork. It is an Icebreaker, Getting to Know You Bingo, to help the students learn information about their peers and me. They will have to find a different person who fits a square on the bingo card, but only one person. They are allowed to use one peer per bingo card (i.e. no reusing the same person on multiple squares).	Listening to the bellwork and responding to my questions.	I am setting up classroom routines like looking for important paper for the day on the table by the door.  I am doing the icebreaker before any introductions so that the students have to talk to their peers and me during the icebreaker.
	After directions the activity will start.	The students will walk around the classroom finding different classmates who fit a specific squares.	
11-20 minutes  Wrapping up Bellwork/Introduction of Me	I will engage the class in a discussion about what they learned about their peers and me during Getting to Know You Bingo. I will ask questions about the activity, such as: Did you they learn any information that was surprising about me or their classmates?  Using our discussion as a beginning point I will tell	They will be responding to questions asked by me or their peers, and even asking their own questions.	I have this discussion to gets students talking. No one thinks that there is a chance to talk in Math class, but Mathematics is full of misconception/misreprese ntations. This way students can learn/relearn that they should not be judging a book/person by its cover.

	the students about myself using a PowerPoint.  Following my PowerPoint I will give them a chance to ask some questions about me, and I will answer them provided they are appropriate questions.	Watching my PowerPoint and asking questions about me or Butler.	
21-25 minutes Classroom Expectations etc.	Transitioning from my introduction I will pass out the class syllabus.  I will point out the important information such as classroom procedures: tardies, homework, etc.  Then I will talk to them about the classroom expectations. I will talk through the important information that will affect the class every day.	They will be reading the syllabus and formulating any questions they have	I am waiting to give the students the syllabus because they have walked, or will walk, into classrooms and that is the first thing talked about. I put more of an emphasis on getting to know the students.
26- 45 minutes Algebra Review	Next I will pass out to the students an Algebra Review worksheet.  I will tell them to pair/group up into pair or groups of 3 to work on their review. It has questions that review the first semester of Algebra 1.	They will group up and work on their review.	I wanted to start the first day off as a review day to help get the students back into school/class mode, and it let them see what they have to remember.
47-50 minutes Wrap Up/Exit Slip	I will collect their activity and get them started on their exit slip. On the back of their Getting to Know Bingo, I will instruct them to write down any questions they have about the class, the procedures, or the classroom	Writing their exit slip and gathering their belonging to leave.	The exit slip is my way of seeing if I accomplished my goals/expectations of getting them to learn about their classmates and me. It also gives them a chance to ask questions privately.

	expectations, and the										
	names of 5 of their peers.										
Closing: Wrap up and Assessment How do you know your students met your lesson objective(s) and to what extent?											
For an exit slip the student will be on the back of their Getting to Kn		e class and the syllabus	s, along with the names of 5 of their peers,								
Daily Assessment Higher Order Thinking Addres	ssed Formative Assessment:		Summative Assessment:								
Higher Order Thinking Address Today:	☐ Class discussion		Test								
iouay.  ⊠ knowledge	Entrance/Exit slip		Project								
comprehension	Teacher Observe	,.	Report								
application	Listened to conversa Quiz	tions	Presentation Final Exam								
analysis	Thumbs up, neutral,	or down	Other								
synthesis	Homework check	01 40 1111									
evaluation	☐ Video quiz										
What would it take to move students from into higher order thinking?	n recall Voting Whiteboard Check Other										
Preparation Needed for this Le	esson:										
Materials: Getting to Know You Review, Syllabus, Information S	•	teaching files <a href="http://w">http://w</a>	ww.allensteachingfiles.com/), Algebra								
Technology: Getting to Know M	e PowerPoint										
Copy: Getting to Know You Bin	go, Algebra Review, Syllabus	, Information Sheet									
Locate:											
<b>Safety Considerations:</b>											
<b>Reflection:</b> What did I learn through the How will assessment data from to	-		ber the next time I teach this lesson?								

Teacher: Rachel Wraley Lesson # in unit: 2/3 Subject/Course Title: Algebra Repeat

## Measurable Lesson Objectives and Assessment of the objectives

## By the end of the class session, student will be able to:

Tell me the steps for factoring.

#### **Content Objectives:**

Solve a quadratic equations by factoring.

## **Academic Language Objectives:**

Important vocabulary: Quadratic equation, solution, factoring, zeroes, and roots.

## Why does this lesson matter?

In different fields quadratic equations are used daily to model real-life situations. They need to know how to solve quadratic equations by factoring in order to solve those equations.

Date:

## Assessment Statement: How will students show they have met the objective?

Students will write down the steps for factoring.

## Specific Standard Indicators Aligned with this Lesson:

AI.QE.4: Solve quadratic equations in one variable by inspection (e.g., for  $x^2 = 49$ ), finding square roots, using the quadratic formula, and factoring, as appropriate to the initial form of the equation.

### **Supporting Diverse Learners**

## Method(s) for Instruction

## **Grouping Strategies:**

Class/Group Discussion
Cooperative Learning

Small Group
Guided Practice
Lab

Lecture or Direct Instruction Question/Answer

Learning Stations Readers/Writers Workshop Teacher Modeling/Demo.

Journal writing Role Play Hands-on Inquiry Learning

Game

Simulation/Role Playing Independent Learning

Other

## **Lesson Agenda**

Warm up: How will you support students in accessing prior knowledge, personal, real world and/or cultural connections?

Time	Teacher Will Be:	Students Will Be:	Rationale:			
1-2 minutes	Welcoming Students and		This is a way to get the			
Welcome/Bellwork	getting them on task.	Bellwork.	students prepared for today's lesson and help			

	_			them make prior knowledge connections.		
6-10 minutes Wrapping up Bellwork	discussion bellwork if they a and what	the students in on over the k. I asks students gree or disagree, at they would have ferently if they	Participate in the "discussion" of the bellwork.	e	This gets the students talking about math and discussing different ways/methods to approach math.  Sometimes even slightly different notation.	
11-40 minutes  Solving Quadratic  Equations by Factoring	_	a lecture/guided for factoring.	Taking notes in the AgileMind textbook			
41-45 minutes  Homework work time		g around the rooming questions as	Working on their factoring homework.		This gives them a chance to start their homework and ask any questions before going home, and doing the homework by themselves.	
46-50 minutes Exit Slip	Telling them students to write the steps for factoring on the back of their Bellwork paper.			For ack of r.	This is my assessment for the lesson.	
Closing: Wrap up and Assessme	<b>nt</b> How do y	ou know your students me	rt your lesson objective(s) o	and to what	extent?	
Daily Assessment Higher Order Thinking Addr Today:		Formative Assessment:  ☐ Class discussion ☐ Entrance/Exit slip ☐ Teacher Observe ☐ Listened to conversations ☐ Quiz ☐ Thumbs up, neutral, or down ☐ Homework check ☐ Video quiz ☐ Voting ☐ Whiteboard Check ☐ Other		Summative Assessment:  Test Project Report Presentation Final Exam Other		
Preparation Needed for this I	Lesson:					
Materials: Bellwork, AgileMin	d textbook					
Technology: AgileMind						
Copy: Bellwork						
Locate:						

## **Safety Considerations:**

**Reflection:** What did I learn through teaching this lesson? What do I want to remember the next time I teach this lesson? How will assessment data from today's lesson impact tomorrow's teaching?

## Teacher: Rachel Wraley Lesson # in unit: 3/3 Subject/Course Title: Algebra Repeat Date:

## Measurable Lesson Objectives and Assessment of the objectives

## By the end of the class session, student will be able to:

Write the steps for solving a quadratic equation using the quadratic formula.

#### **Content Objectives:**

Solve quadratic equations using the quadratic formula.

### **Academic Language Objectives:**

Important vocabulary: Quadratic equation, solution, Quadratic Formula, ax²+bx+c, and zeroes.

## Why does this lesson matter?

In different fields quadratic equations are used daily to model real-life situations. They need to know how to solve quadratic equations by quadratic formula in order to solve those equations. Especially if factoring is too difficult to work out.

## Assessment Statement: How will students show they have met the objective?

Students will write the steps for solving a quadratic equation using the quadratic formula.

## Specific Standard Indicators Aligned with this Lesson:

AI.QE.4: Solve quadratic equations in one variable by inspection (e.g., for  $x^2 = 49$ ), finding square roots, using the quadratic formula, and factoring, as appropriate to the initial form of the equation.

## **Supporting Diverse Learners**

## Method(s) for Instruction

### **Grouping Strategies:**

Class/Group Discussion Teacher Modeling/Demo.

Cooperative Learning
Small Group
Guided Practice
Lab

Journal writing
Role Play
Hands-on
Inquiry Learning

Lecture or Direct Instruction Game
Simulation

Question/Answer
Learning Stations

Simulation/Role Playing
Independent Learning

Readers/Writers Workshop Other

## Lesson Agenda

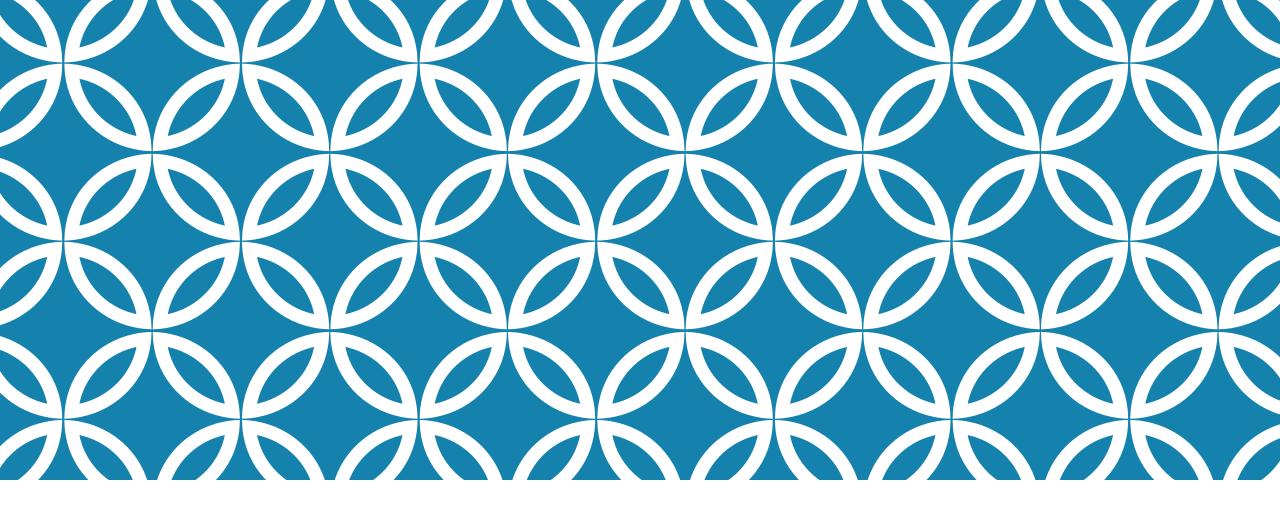
Warm up: How will you support students in accessing prior knowledge, personal, real world and/or cultural connections?

Time	Teacher Will Be:	Students Will Be:	Rationale:
1-2 minutes Welcome/Bellwork	Welcoming Students and getting them on task.  Walking around keeping students on task.	Working on their Bellwork.	This is a way to get the students prepared for today's lesson and help

Wrapping up Bellwork  discussion bellwork if they ago and what		g the students in on over the k. I asks students agree or disagree, at they would have fferently if they e.			them make prior knowledge connections.  This gets the students talking about math and discussing different ways/methods to approach math.  Sometimes even slightly different notation.
Solving Quadratic Equations using the Quadratic Formula	practice quadrati	g a lecture/guided e for solving tic equations using adratic formula.  Taking notes in AgileMind texther the control of the co			
41-45 minutes  Homework work time		g around the rooming questions as	Working on their factoring homework	rk.	This gives them a chance to start their homework and ask any questions before going home, and doing the homework by themselves.
Exit Slip write the a quadra the quadra		them students to e steps for solving atic equation using dratic formula on a of their Bellwork	Writing the steps for solving a quadratic equation using the quadratic formula on the back of the Bellwork paper.  et your lesson objective(s) and to what		This is my assessment for the lesson.
Daily Assessment		E-marking Assessment		S	. 4
Higher Order Thinking Addr Today:  knowledge comprehension application analysis synthesis evaluation  What would it take to move students fr into higher order thinking?		Formative Assessment:  Class discussion Entrance/Exit slip Teacher Observe Listened to conversations Quiz Thumbs up, neutral, or down Homework check Video quiz Voting Whiteboard Check Other		Test Project Report Present	tation
Preparation Needed for this I	Lesson:				
Materials: Bellwork, AgileMino	d textbook				
Technology: AgileMind					

Copy: Bellwork	
Locate:	
Safety Considerations:	

**Reflection:** What did I learn through teaching this lesson? What do I want to remember the next time I teach this lesson? How will assessment data from today's lesson impact tomorrow's teaching?



GETTING TO KNOW YOU(ME)

Ms. Wraley

## **ABOUT ME**

I was born and raised in Indianapolis, IN

I graduated from Ben Davis High School

I am currently a senior at Butler University studying Mathematics and Secondary Mathematics Education





## HOBBIES

## Music- Singing or Playing the Piano

I sang in Ben Davis Sounds show choir for 2 years and played in the band for Ben Davis Premiers for 1 year.

## Reading

I am currently reading the Heroes of Olympus, The Selection Series, and The Robert Langdon (Da Vinci Code) Series.

## Musicals- Movies or Broadway

I have seen multiple musicals including Wicked when it came it Indy and Mamma Mia! in New York City.

# LAST SUMMER

I volunteered at the Humane Society of Indianapolis

I explored Cincinnati

- I went to the Zoo
- And King's Island





# Welcome to Algebra 1 with Ms. Wraley

## **Contact Me**

Email: <a href="mailto:rwraley@butler.edu">rwraley@butler.edu</a>

Phone: 317-910-2475

## **Class Description:**

In this class we will use your preexisting math knowledge and skills from past math classes to enter into the fun and amazing world of Algebra.

## **Course Goals:**

After this class I hope that you will

- Have a greater appreciation for math in general and algebra in particular
- Have a greater understanding of algebra and algebraic concepts
- Know how to apply algebraic concepts to real-life problems
- Have fun!

## Classroom expectations:

Our classroom has a few basic expectations and rules that everyone in the classroom will have to follow.

- Students will be respectful to all in the classroom
- Students will come prepared to class each day
- Students will give their best effort on all classroom activities and homework
- Students will help make this class collaborative

## What to Expect from Your Teacher:

Just as there are expectations that I hold for you. There are a few expectations that can expect from me.

- I will always come to class prepared
- I will be respectful to all
- I will have a positive attitude
- I will always try to help everyone

## Classroom Rules:

There are a few basic rules that everyone in the classroom has to follow.

- Students will raise their hand and wait to be called on before speaking
- Students will not wander around the classroom during lesson time

- Students will be in their seats and working on the Bellringer when the bell rings
- Students will be active and respectful listeners to whomever is speaking
- Students will keep their hands, arms, and feet to themselves

## Consequences:

If you don't follow the rules of classroom these are your consequences.

- Verbal warning
- Written warning
- Moving a student to a different location within the classroom
- Having the student go out into the hallway
- Detention
- Calling the student's parents
- Sending the student to the office

The consequences vary depending on the severity of the ruling breaking.

## **Classroom Procedures:**

## Daily Routine

 Each day's Agenda and Daily Objectives will be written on whiteboard on the front wall of the classroom every day. If you ever want to know the day's schedule, just look at the whiteboard.

## Bellringer/Warm Up

o You will pick up the Bellringer every day as you walk into the classroom. This will act like a refresher from past lessons and warm up to the current day's lesson.

## Homework Check

o This is your opportunity to ask me any questions about the homework before you turn it in. When check is completed you will turn your homework into the class period tray after the front of the classroom.

## Class Lesson/Activity

o There will be days where we just have a lesson, or an activity, and sometimes we will have both. If there is an activity you will still be expected to follow all classroom rules and expectations. If you are not complying with the rules or expectations you will be pulled out of the activity and given alternative work.

## Wind Down/Exit Slip

o This will be the last 5 minutes of class where we end our lesson or activity and start collecting our things. This will also be the time that I give you your homework for the night. Before

leaving you will give me some form of an Exit Slip (sometimes it's your activity or it could be a separate sheet of paper)

## Tardies

o If you are late to class you will go get your tardy slip per Pike High School policies. If you are wandering around the classroom when the bell rings that will count as a classroom tardy. After three classroom tardies you will serve a lunch detention with me.

### Absences

o Being absent does not excuse you from any homework, quizzes, or tests. You, the student, are responsible for getting any make up assignments. You can get missed assignments by you or your parent calling me or emailing me.

## Supplies:

Part of the classroom expectations is to come to class prepared. Being prepared means bringing the following supplies.

- Pencils or Pens
- Paper
- Folder
- Homework
- A positive attitude ©.

**Grading Policy:** Your semester grade will consist of assessments (80%) and practice (20%).

**Assessments (80%)**-Assessments will consist of TESTS given at the conclusion of each unit/topic.

**Practice (20%)**-Practice includes homework, projects, student activity sheets, bell work, exit slips, and assigned class work. Students should expect to have a form of practice **each** day/night of class. LATE WORK will be accepted for 70% credit.

Grading Scale (The Pike High School Policy)

A+	Α	Α-	B+	В	B-	C+	$\bigcirc$	Ċ	D+	D	D-	F+	F	F-
100-	96-	92-	89-	86-	82-	79-	76-	72-	69-	66-	62-	59-	39-	19-
97	93	90	87	83	80	77	73	70	67	63	60	40	20	0

### Math Resources

If you have a question about homework or any assignment please contact me with questions, but if you cannot contact me here are some Math Resources

Ask Rose- It's a Math Homework hotline call 1-877-ASK-ROSE

## My Personal Beliefs about Teaching

I believe there are a few simple things that make a class successful. First I believe that the teacher has a very important role. The teacher is to be a facilitator, not a dictator. It is not my job to rule your entire academic life. There are a lot of different factors in class that I have choice/control over, but my role is also to let you have a chance to take responsibility for your learning. I should facilitate you knowledge acquisition. Secondly I believe that it is my job to give you (the student) the best possible learning environment. This classroom is somewhere that I would hope you feel safe in. I want to make this classroom a welcoming and safe environment where you feel safe and encourage to take chances, make mistakes, and learn.

Dear Parents and Guardians.

I am Rachel Wraley, and I would like to welcome you to my classroom and to tell you a little bit about myself and a few of my classroom policies.

A little background about me. I graduated from Butler University with a Bachelor of Science in Secondary Mathematics Education and Mathematics in May 2016.

## My Beliefs about Education

I believe there are a few simple things that make a class successful. First I believe that the teacher has a very important role. The teacher is to be a facilitator, not a dictator. It is not my job to rule your child's entire academic life. There are a lot of different factors in class that I have choice/control over, but my role is also to let the students have a chance to take responsibility for their learning. I should facilitate their knowledge acquisition. Secondly I believe that it is my job to give the students the best possible learning environment. This classroom is somewhere that I would hope they feel safe. I want to make this classroom a welcoming and safe environment where they feel safe and encourage to take chances, make mistakes, and learn.

#### Classroom Policies

- Absences
  - o If your child is absent from school you can always get the makeup work by either emailing me or calling me
- **Supplies:** These are general supplies that your child will need every day in order to be successful in class.
  - o Pencils or Pens
  - o Paper
  - o Folder
  - o Homework

I want all students to be successful so if you ever have any concerns please feel free to email me or call. I will always respond within 24 hours.

Email: rwraley@butler.edu

Phone: 317-910-2475