sabrina knopf

mineola high school

Reflective Practitioner Presentation

$$Success = A^3 + D$$

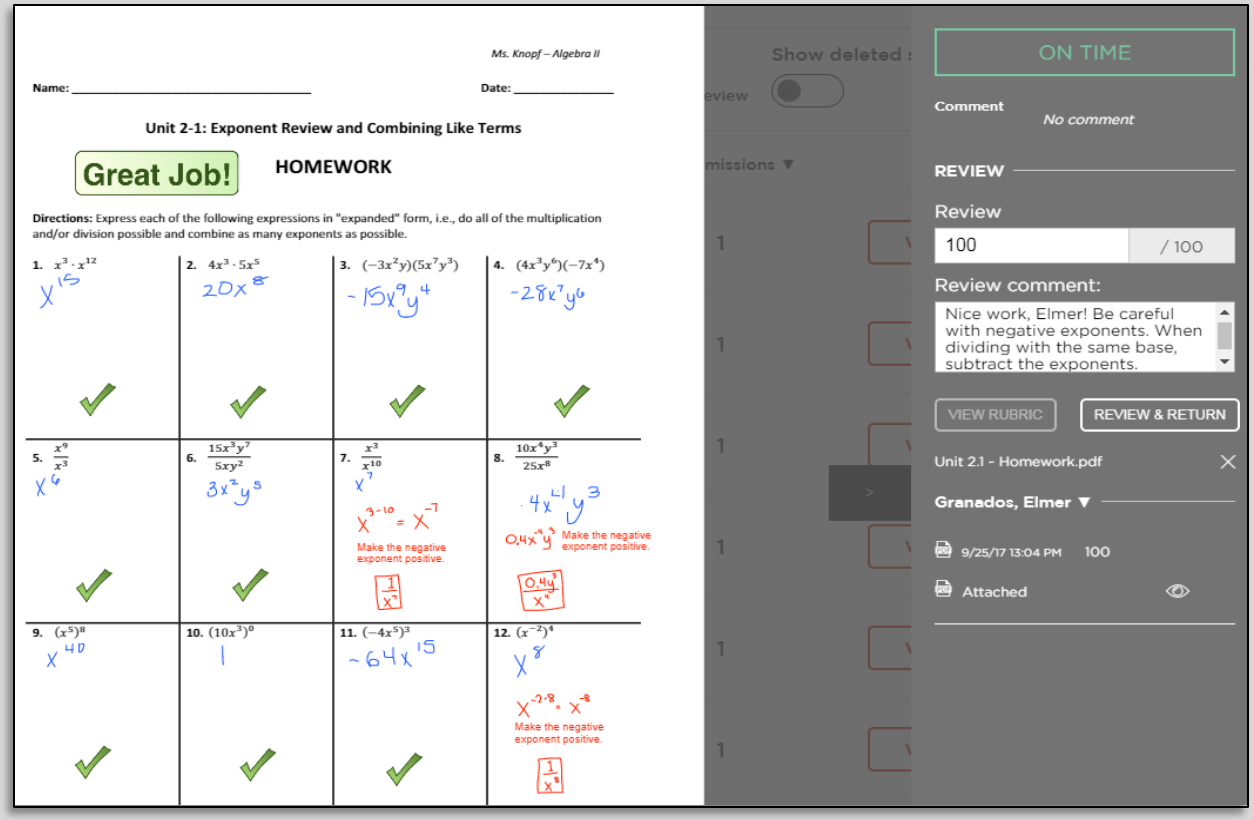
(Algebra • Apple • Assessments) + Differentiation

Instructional Focus and the Evidence

I have grown this year by learning how to incorporate technology effectively both in and out of the classroom as a means of formative and summative assessment, as well as a tool to plan and pace my lessons. I began the year assigning do now assignments and exit tickets on printed sheets of paper or via eBackpack. This method of assessment was not allowing me to gain instant feedback or assess my students in real time. As a result of this, I was unable to modify and pace my lessons as effectively as I could have been. I went through many days of trial and error to see which applications worked with the curriculum, and which applications did not. Utilizing the iPad has allowed me to differentiate and tier classwork assignments and homework, and continuously monitor and assess my students to ensure successful pacing and execution of material.

Evidence #1a: Student Work (A)

Shown below is a homework assignment given on eBackpack that I was not able to assess/grade until the following day once all students had turned it in. This method of assigning homework did not allow me to quickly assess what needed to be discussed in class the following day.



Ms. Knopf – Algebra II

Name: _____ Date: _____

Unit 2-1: Exponent Review and Combining Like Terms

Great Job! HOMEWORK

Directions: Express each of the following expressions in "expanded" form, i.e., do all of the multiplication and/or division possible and combine as many exponents as possible.

1. $x^3 \cdot x^{12}$ — x^{15} ✓
2. $4x^3 \cdot 5x^5$ — $20x^8$ ✓
3. $(-3x^2y)(5x^7y^3)$ — $-15x^9y^4$ ✓
4. $(4x^3y^6)(-7x^4)$ — $-28x^7y^6$ ✓
5. $\frac{x^9}{x^3}$ — x^6 ✓
6. $\frac{15x^3y^7}{5xy^2}$ — $3x^2y^5$ ✓
7. $\frac{x^3}{x^{10}}$ — x^7 $x^{3-10} = x^{-7}$ Make the negative exponent positive. $\frac{1}{x^7}$
8. $\frac{10x^4y^3}{25x^8}$ — $0.4x^{-4}y^3$ Make the negative exponent positive. $\frac{0.4y^3}{x^4}$
9. $(x^5)^8$ — x^{40} ✓
10. $(10x^3)^0$ — 1 ✓
11. $(-4x^5)^3$ — $-64x^{15}$ ✓
12. $(x^{-2})^4$ — x^8 $x^{-2 \cdot 8} = x^{-8}$ Make the negative exponent positive. $\frac{1}{x^8}$

Show deleted :

ON TIME

Comment *No comment*

REVIEW

Review

100 / 100

Review comment:

Nice work, Elmer! Be careful with negative exponents. When dividing with the same base, subtract the exponents.

VIEW RUBRIC REVIEW & RETURN

Unit 2.1 - Homework.pdf

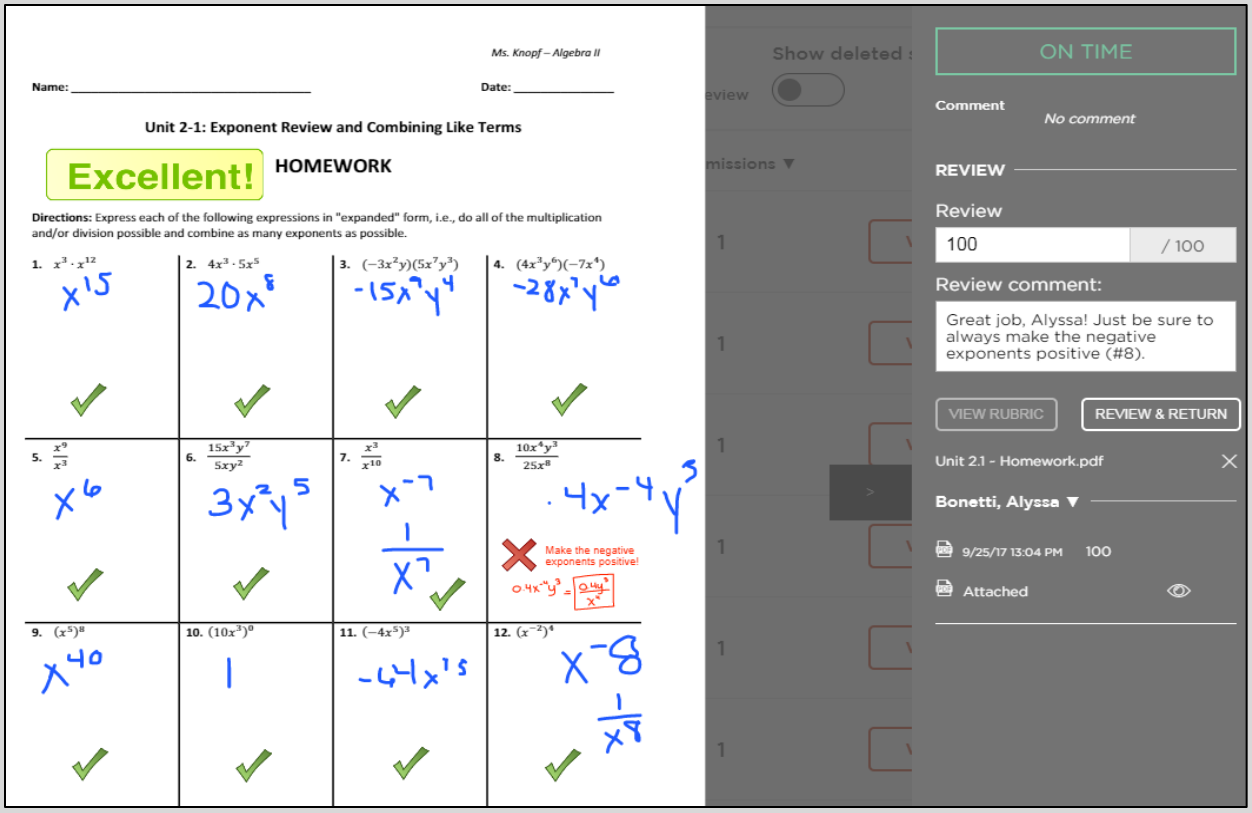
Granados, Elmer

9/25/17 13:04 PM 100

Attached

Evidence #1b: Student Work (B)

Shown below is a homework assignment given on eBackpack that I was not able to assess/grade until the following day once all students had turned it in. This method of assigning homework did not allow me to quickly assess what needed to be discussed in class the following day.



Ms. Knopf – Algebra II

Name: _____ Date: _____

Unit 2-1: Exponent Review and Combining Like Terms

Excellent! HOMEWORK

Directions: Express each of the following expressions in "expanded" form, i.e., do all of the multiplication and/or division possible and combine as many exponents as possible.

1. $x^3 \cdot x^{12}$ x^{15} ✓	2. $4x^3 \cdot 5x^5$ $20x^8$ ✓	3. $(-3x^2y)(5x^7y^3)$ $-15x^9y^4$ ✓	4. $(4x^3y^6)(-7x^4)$ $-28x^7y^6$ ✓
5. $\frac{x^9}{x^3}$ x^6 ✓	6. $\frac{15x^3y^7}{5xy^2}$ $3x^2y^5$ ✓	7. $\frac{x^3}{x^{10}}$ x^{-7} $\frac{1}{x^7}$ ✓	8. $\frac{10x^4y^3}{25x^8}$ $.4x^{-4}y^3$ ✗ Make the negative exponents positive! $0.4x^{-4}y^3 = \frac{0.4y^3}{x^4}$
9. $(x^5)^8$ x^{40} ✓	10. $(10x^3)^0$ 1 ✓	11. $(-4x^5)^3$ $-64x^{15}$ ✓	12. $(x^{-2})^4$ x^{-8} $\frac{1}{x^8}$ ✓

ON TIME

Comment *No comment*

REVIEW

Review

100 / 100

Review comment:

Great job, Alyssa! Just be sure to always make the negative exponents positive (#8).

VIEW RUBRIC REVIEW & RETURN

Unit 2.1 - Homework.pdf

Bonetti, Alyssa

9/25/17 13:04 PM 100

Attached

Evidence #2a: Student Data

Shown below are some Mathspace assignments that were assigned as do now assignments, exit slips, homework assignments, and for independent/partner work during class.

Mathspace Results from September 6 – September 13

Name	Start Date	Due Date	Participation	Average
9/13 - factoring review 1	Sep 13	Sep 13	100%	66%
9/12 Classwork: Factoring Completely Practice	Sep 12	Sep 12	91%	69%
Trinomials (a>1)	Sep 11	Sep 11	95%	47%
DOTS Homework	Sep 7	Sep 8	74%	72%
GCF Homework	Sep 6	Sep 7	65%	41%

Evidence #2a: Student Data

Shown below are some Mathspace assignments that were assigned as do now assignments, exit slips, homework assignments, and for independent/partner work during class.

September 11 – Trinomials (a>1) Data

Results by Question

Q #	Question	Participation Rate	Average Result
Q1,3,4	Factor the following trinomial: $10x^2 + 23x + 12$	95%	54%
Q2	Factor the trinomial: $6x^2 - 32x + 10$	82%	26%

Evidence #2a: Student Data

Shown below are some Mathspace assignments that were assigned as do now assignments, exit slips, homework assignments, and for independent/partner work during class.

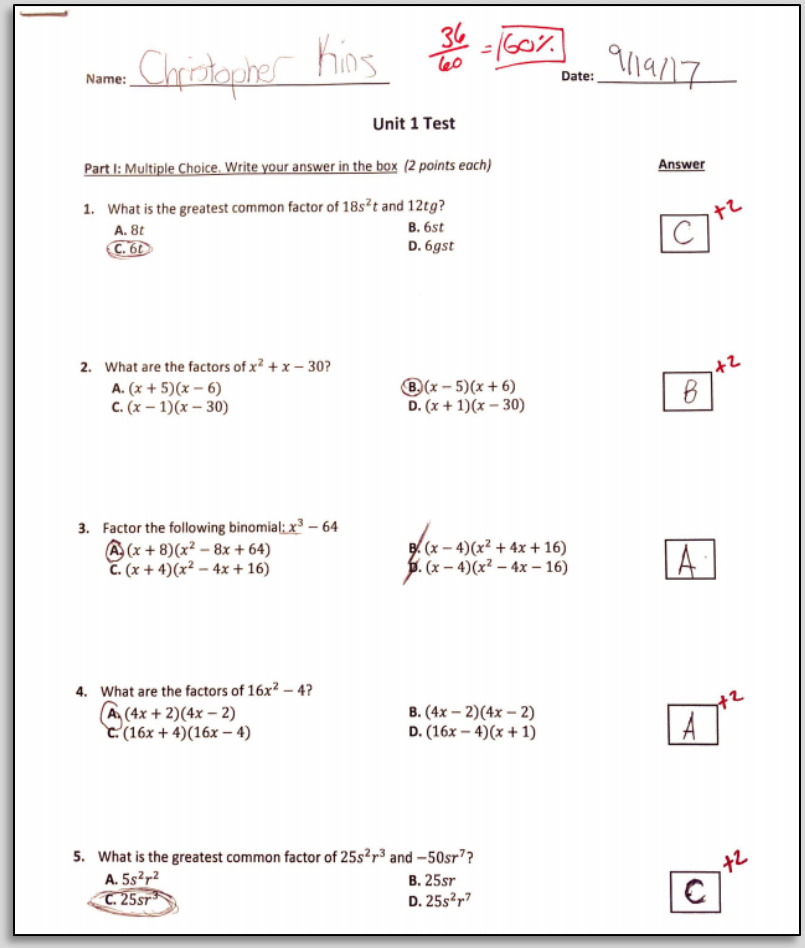
September 12 – Factoring Completely Practice Data

Results by Question

Q #	Question	Participation Rate	Average Result
Q1	Factor the expression $10m - 70$.	91%	60%
Q2,6,9,17	Factor the expression: $u^2 - 36$	86%	84%
Q3	What is the greatest common factor of $22x$ and 33?	86%	78%
Q4,19	Factor the following expression: $8p^2q^3 + 9p^4q^6 + 5p^6q^9$	86%	38%
Q5	Factor and simplify the following: $-5x^2 - 40x - 25x$	82%	58%
Q7,13	Factor $5nt - 20tr$	86%	62%
Q8	Factor the following expression by taking out the greatest common factor: $9 - 3x$	82%	75%
Q10	Factor the following expression by taking out the greatest common factor: $25 + 5y$	82%	60%
Q11,12	Factor $x^2 + 24x + 144$	82%	74%
Q14,16	Factor $x^2 - 6x + 8$.	73%	81%

Evidence #2b: Student Data

Shown below are students who had poor test performance.



Name: Christopher Kins 36/60 = 60% Date: 9/19/17

Unit 1 Test

Part I: Multiple Choice. Write your answer in the box *(2 points each)* **Answer**

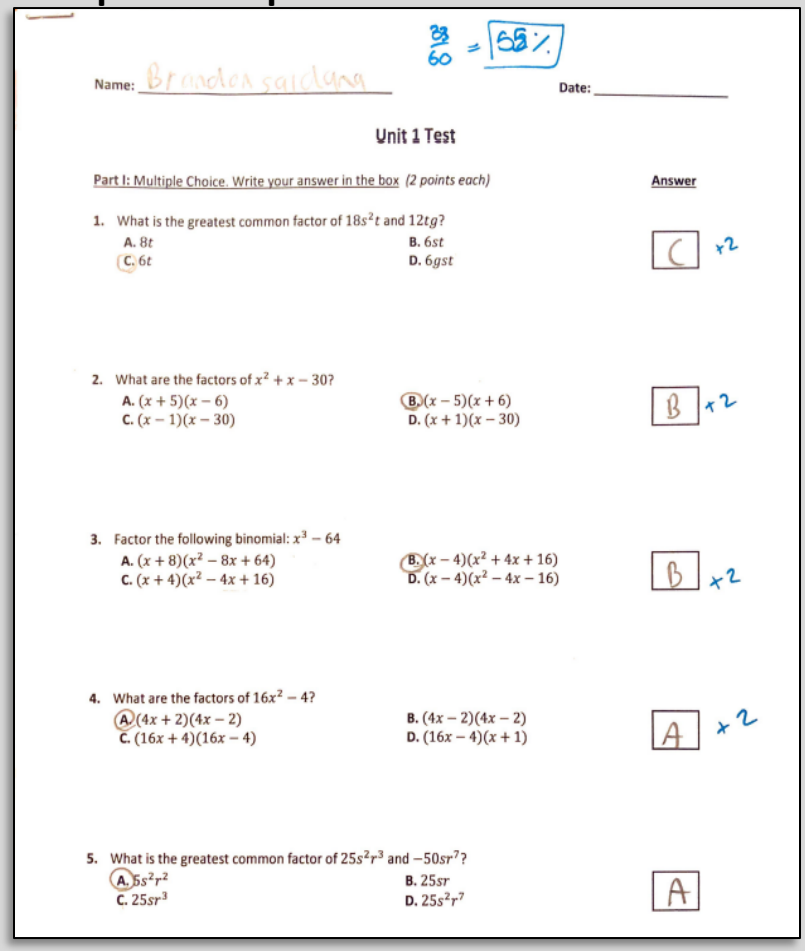
1. What is the greatest common factor of $18s^2t$ and $12tg$?
   A. $8t$ B. $6st$
   C. $6t$ D. $6gst$
   Answer: C +2

2. What are the factors of $x^2 + x - 30$?
   A. $(x+5)(x-6)$ B. $(x-5)(x+6)$
   C. $(x-1)(x-30)$ D. $(x+1)(x-30)$
   Answer: B +2

3. Factor the following binomial: $x^3 - 64$
   A. $(x+8)(x^2-8x+64)$ B. $(x-4)(x^2+4x+16)$
   C. $(x+4)(x^2-4x+16)$ D. $(x-4)(x^2-4x-16)$
   Answer: A

4. What are the factors of $16x^2 - 4$?
   A. $(4x+2)(4x-2)$ B. $(4x-2)(4x-2)$
   C. $(16x+4)(16x-4)$ D. $(16x-4)(x+1)$
   Answer: A +2

5. What is the greatest common factor of $25s^2r^3$ and $-50sr^7$?
   A. $5s^2r^2$ B. $25sr$
   C. $25sr^3$ D. $25s^2r^7$
   Answer: C +2



Name: Brandon Saldana 55% Date:

Unit 1 Test

Part I: Multiple Choice. Write your answer in the box *(2 points each)* **Answer**

1. What is the greatest common factor of $18s^2t$ and $12tg$?
   A. $8t$ B. $6st$
   C. $6t$ D. $6gst$
   Answer: C +2

2. What are the factors of $x^2 + x - 30$?
   A. $(x+5)(x-6)$ B. $(x-5)(x+6)$
   C. $(x-1)(x-30)$ D. $(x+1)(x-30)$
   Answer: B +2

3. Factor the following binomial: $x^3 - 64$
   A. $(x+8)(x^2-8x+64)$ B. $(x-4)(x^2+4x+16)$
   C. $(x+4)(x^2-4x+16)$ D. $(x-4)(x^2-4x-16)$
   Answer: B +2

4. What are the factors of $16x^2 - 4$?
   A. $(4x+2)(4x-2)$ B. $(4x-2)(4x-2)$
   C. $(16x+4)(16x-4)$ D. $(16x-4)(x+1)$
   Answer: A +2

5. What is the greatest common factor of $25s^2r^3$ and $-50sr^7$?
   A. $5s^2r^2$ B. $25sr$
   C. $25sr^3$ D. $25s^2r^7$
   Answer: A

Evidence #3: Observation Feedback

Observation feedback suggested that I assess my students differently to pace my lessons better. Using applications to gain instant feedback of where my students are struggling and succeeding would have corrected the dilemma that had originally delayed this lesson.

Recommendations:

One area that needs improvement is pacing. As I mentioned during the post-observation, students needed to practice more thus allowing Ms. Knopf to collect more evidence of learning and understanding. The review of the factoring method for solving quadratic equations took approximately 18 minutes. That was almost half the class time. One quick reference exercise would have been sufficient.

Also, it is good practice to have some print copies of activities. Some instructional time was lost due to failure with some of the students' iPads. Two of the groups necessitated redirection during class activities. It might be beneficial to raise the grouping for future lessons.

When teaching the quadratic formula, it is important to show students the effect of the discriminant on the nature of the roots form the onset. I am sure the discriminant will be explored in future lesson. This could have been accomplished by having students solved different problems yielding answers that represent the causal effect of the discriminant.

If you had the opportunity to teach this lesson again to this same group of students, what would you do differently? Why? (4A)

If I had the opportunity to teach this lesson again, I would alter my lesson objectives, and spend more time in the beginning of the lesson breaking down the steps of using the quadratic formula. I would focus more heavily on determining a, b and c, and plugging them into the formula correctly. I would tier my objectives differently. I would change them to the following:

- Students will be able to list the values of the variables a, b, and c given a quadratic equation.
- Students will be able to demonstrate how to plug the corresponding numbers into the quadratic formula.
- Students will be able to demonstrate and explain the correct steps how to solve the quadratic formula.
- Students will be able to simplifying their final answer, including simplifying radicals and imaginary numbers.
- **For students who are advanced:** Students will be able to synthesize their understanding of the quadratic formula by creating their own quadratic equation, and explaining how to solve it using the quadratic formula.

Next time I teach this lesson, I will focus more heavily on the basic information that the students need to know before they begin to use the quadratic formula. If I would have went slower in the beginning, I would not have had to do as much RAMP-ing throughout the first period of the class. Although students did achieve the objectives by the end of second period, I know that it would have been quicker for them to understand the formula if it were broken down more in the beginning. Overall, I would alter my objectives and pace the lesson differently (slower in the beginning regarding the first and second objectives above) to ensure that all students are understanding the topic.

Evidence #3: Observation Feedback

Observation feedback also suggested that I continuously assess my students and encourage individualized mastery of the material using alternate assessments and extra credit assignments. This was able to be achieved by assigning "choice activities" as shown in the following evidence.

Recommendations:

I would recommend that when formulating questions you be careful not to use leading questions as they are often difficult to ascertain whether students truly know the answer. For example, you asked several leading questions during this lesson. Two examples are below:

1. "You have your X and your.....?
2. Domain is all your ..... X or Y?

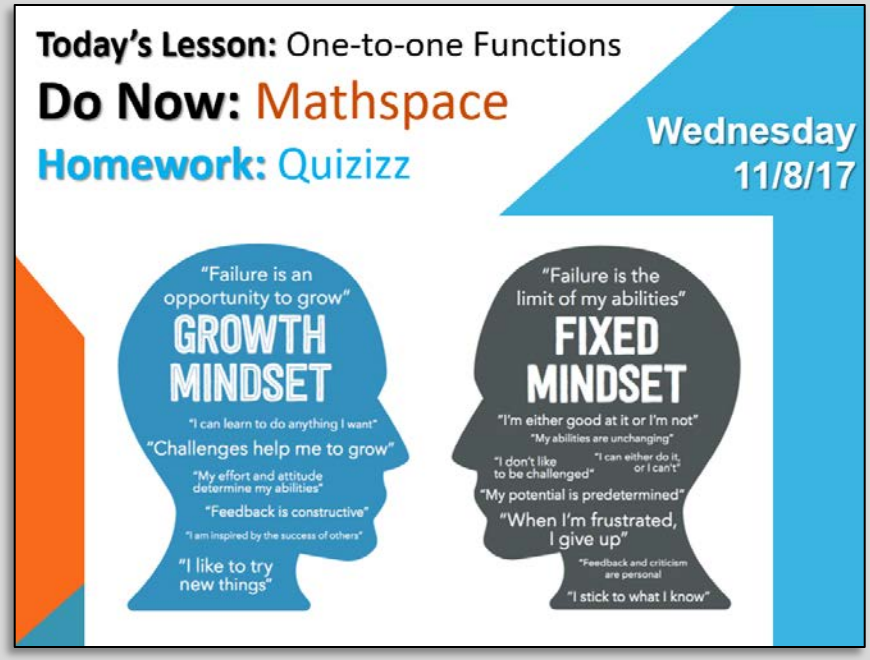
When reviewing the unit test results I noticed that while most students performed well, six students were not successful; two of whom did test corrections and earned 10 additional points. To that end, continue to look for ways to for students to demonstrate competency and master concepts "post unit test." This would encourage the learning of material at a later time and can be done so through an alternative assessment (e.g. video creation, written explanation, test, etc.).

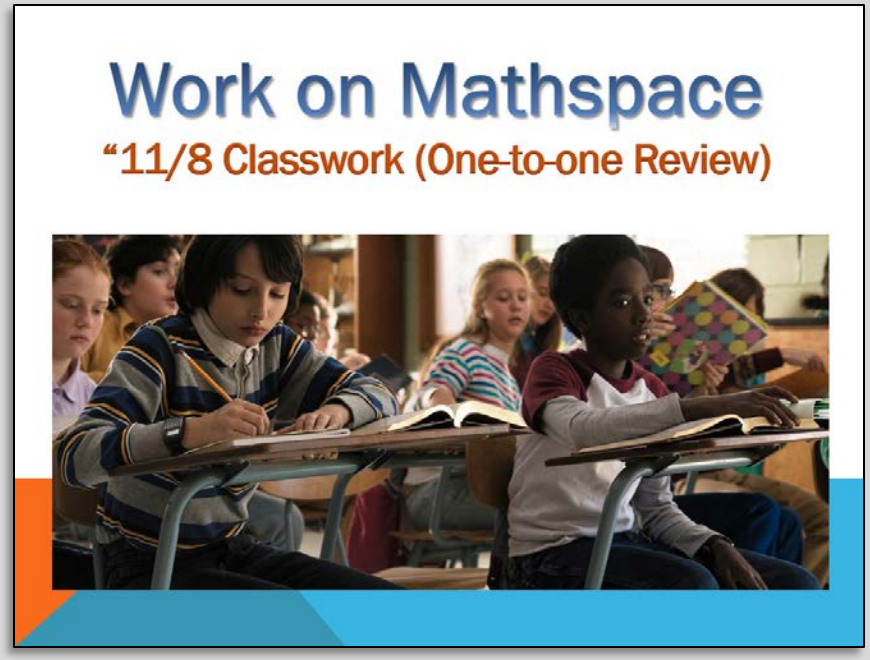
If you had the opportunity to teach this lesson again to this same group of students, what would you do differently? Why? (4A)

If I had the opportunity to teach this lesson again, I would switch the order of my lesson. For these students, the Quizlet Live seemed to get them even more involved and excited. I would start with a Mathspace Do Now, then move on to guided practice, and finish up the period with an exciting review game using Quizlet Live or a Jeopardy game. I would then start the next period with group work based on similar abilities (maximum of 3 students), and have students in each group work on one specific problem. They would have to create a way to explain it using Doceri, Show Me, or FlipGrid if they do not want to speak in front of the class, and then "teach" the class. By doing this, all students will have already practiced the problems, worked through them as teams, and now have to reach a deeper understanding by knowing how to explain it to their classmates. The other students would be required to write down the work that is being explained.

Evidence #4a: Lesson Plans and Artifacts

The following are portions of lessons where I tried to use a multitude of applications to supplement learning. Most of these were tiered, and students were grouped together based on their ability and needs.





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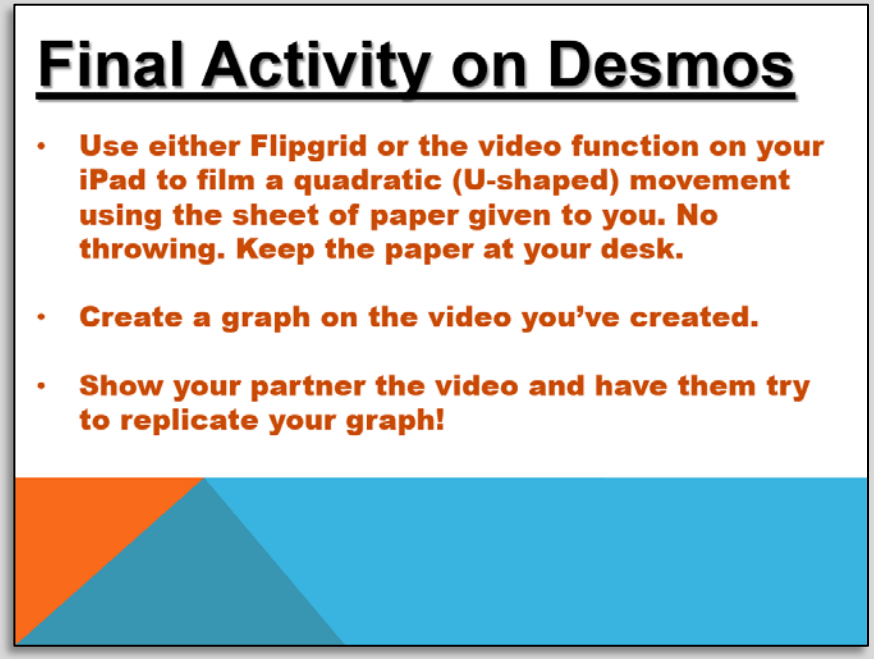

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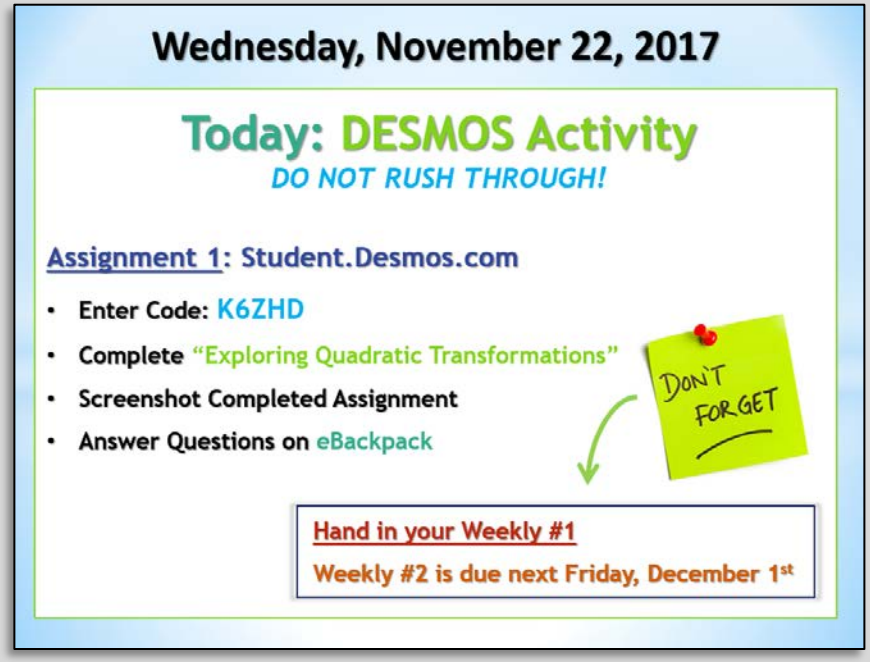
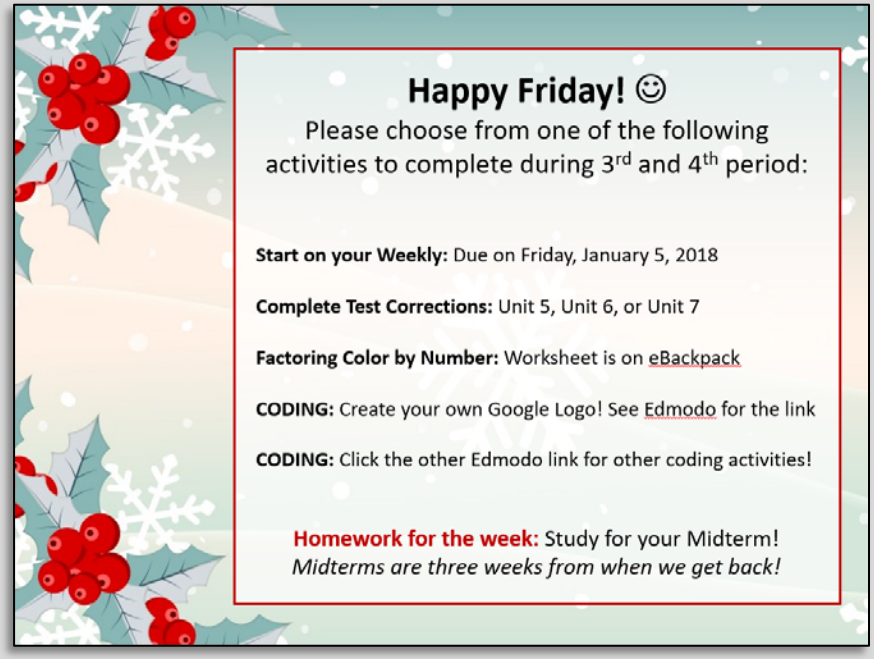




Evidence #4b: Lesson Plans and Artifacts

The following are portions of lessons where I tried to use a multitude of applications to supplement learning. Most of these were tiered, and students were grouped together based on their ability and needs.

Choice Activity: Unit 5 Review!

Choose a partner and complete two of the following assignments

Choose 1 activity

Quiz Grade

MATHSPACE

Unit 5 Review

This will count as a quiz grade!

Please be sure to write down ALL work on a separate sheet of paper! Take a picture of your work and upload it to eBackpack along with a screenshot of the result of your assignment you chose.

QUIZZIZ

Code: 450611

Evidence #4b: Lesson Plans and Artifacts

The following are portions of lessons where I tried to use a multitude of applications to supplement learning. Most of these were tiered, and students were grouped together based on their ability and needs.

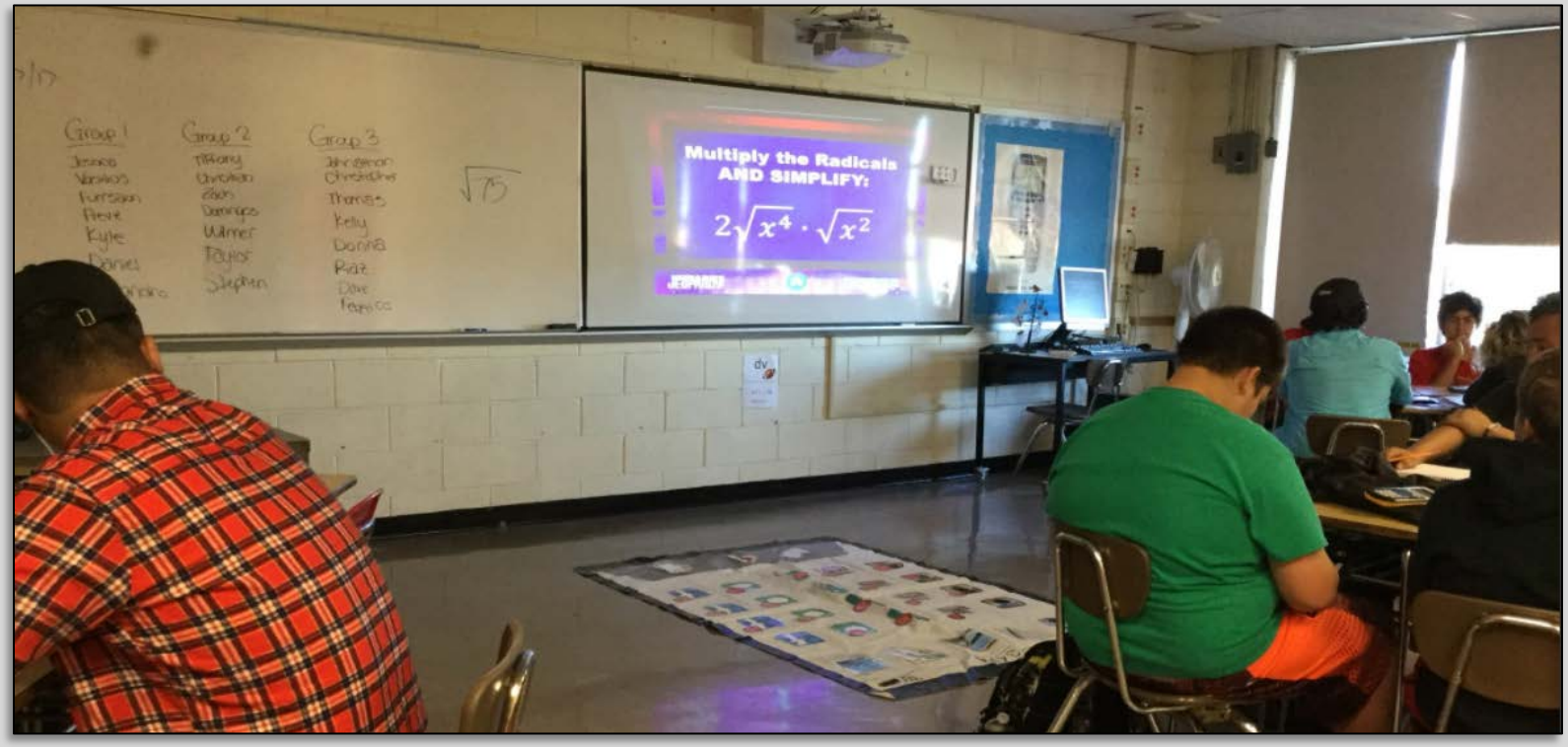
JEOPARDY REVIEW GAME

Group 1	Group 3	Group 5
Jessica	Taylor	Alejandro
Domingos	Federico	Vasilios
Daniel	Riaz	Tiffany
Christopher	Donna	Zachary

Group 2	Group 4
David	Kyle
Furrsaun	Aeve
Thomas	Christian
Johnathan	Stephen

Evidence #4b: Lesson Plans and Artifacts

The following are portions of lessons where I tried to use a multitude of applications to supplement learning. Most of these were tiered, and students were grouped together based on their ability and needs.



Evidence #5a: Student Work (Mathspace)

The following are collections of student work that show student improvement. (Please note that the "Start Date" is not accurate on some assignments since the Mathspace update).

Name	Start Date	Due Date	Participation	Average
10/12 - Homework	Nov 13	Nov 15	100%	100%
Friday 4th Period Classwork	Nov 13	Nov 15	100%	89%
11/3 Homework	Nov 13	Nov 15	100%	91%
9/7 - DOTS Homework	Nov 13	Nov 15	100%	90%
Tuesday 11/14 - Do Now	Nov 14	Nov 14	86%	75%

Evidence #5a: Student Work (Mathspace)

The following are collections of student work that show student improvement. (Please note that the "Start Date" is not accurate on some assignments since the Mathspace update).

Name	Start Date	Due Date	Participation	Average
Classwork 11/15	Nov 15	Nov 15	68%	75%
11/15 - Do Now	Nov 15	Nov 15	82%	87%
11/14 - Homework	Nov 14	Nov 15	82%	45%
10/12 - Homework	Nov 13	Nov 15	100%	100%
11/2 - Homework	Nov 13	Nov 15	100%	100%

Evidence #5a: Student Work (Mathspace)

The following are collections of student work that show student improvement. (Please note that the "Start Date" is not accurate on some assignments since the Mathspace update).

Name	Start Date	Due Date	Participation	Average
Friday 4th Period Classwork	Nov 13	Nov 15	100%	89%
9/7 - DOTS Homework	Nov 13	Nov 15	100%	90%
11/2 - Homework	Nov 13	Nov 15	100%	100%
10/12 - Homework	Nov 13	Nov 15	100%	100%
Tuesday 11/14 - Do Now	Nov 14	Nov 14	86%	75%

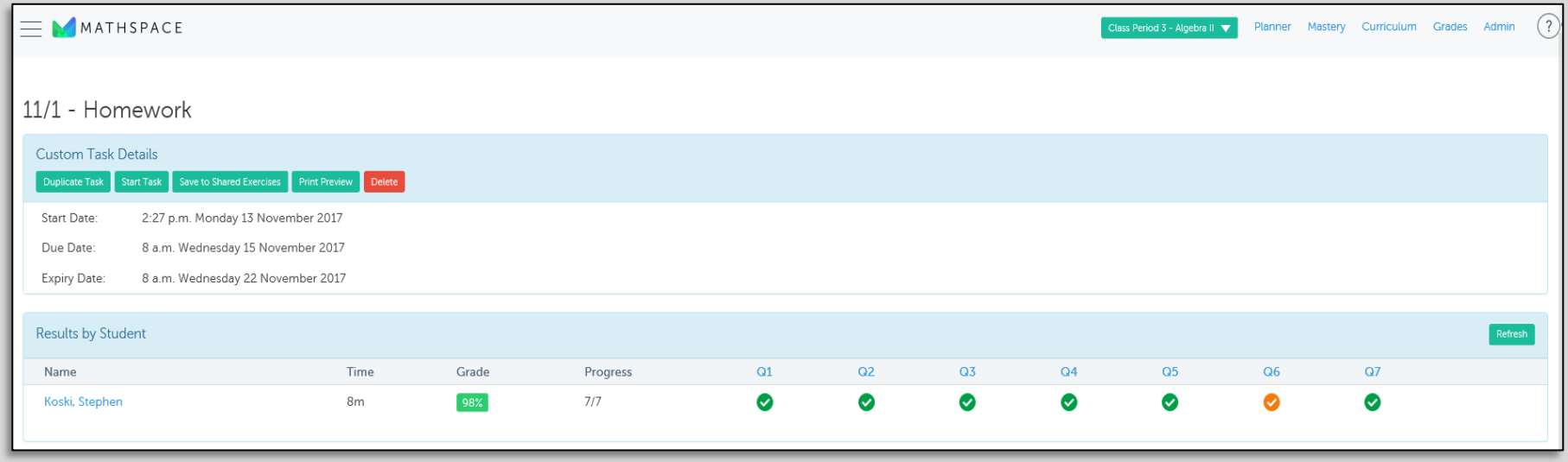
Evidence #5b: Student Work (Tiered)

The following is a TIERED assignment for a student who did not understand the homework the first time he attempted it. There was a dramatic improvement!

Original Grade: 33%

Koski, Stephen	3m	33%	7/7	✗	✗	✓	✗	✗	✗	✓

Redo Grade: 98%



Evidence #5b: Student Work (Tiered)

The following is a TIERED assignment for a student who did not understand the homework the first time he attempted it. There was a dramatic improvement!

Redo Grade by question:

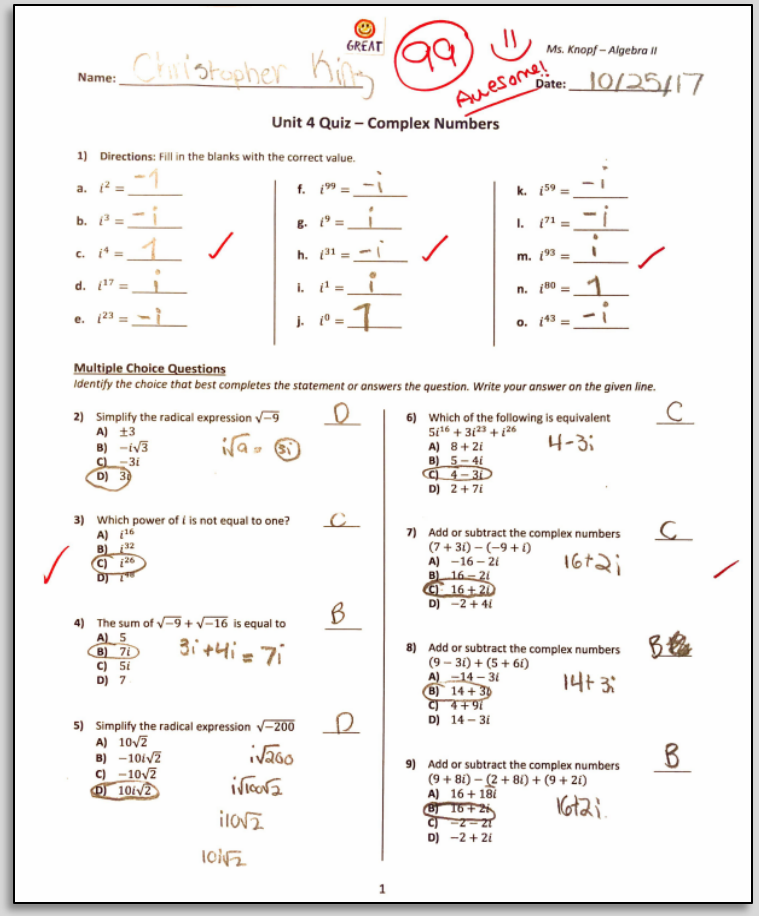
Results by Question — Refresh

Q #	Question	Participation Rate	Average Result
Q1	Consider the function $y = 2x - 3$.	100%	100%
Q2	For a function f, what does $f(6)$ represent?	100%	100%
Q3	True or False? When working with a function, substituting a certain value of x into the formula gives only 1 value of y for that value of x.	100%	100%
Q4	What is the name used to describe a graph where for some value of x, there exists 2 or more different values of y?	100%	100%
Q5	True or False? A horizontal line can intersect the graph of a function at more than one point.	100%	100%
Q6	Consider the following set of points: $\{(19, 5), (-1, 22), (-15, 5), (-10, -22)\}$	100%	92%
Q7	Consider the points in the table.	100%	100%

x	-4	-3	-2	-1	0	1	2	3	4
y	4	3	2	1	0	1	2	3	4

Evidence #5c: Student Work (Improved)

The following are comparisons of the two students from data item #2b.



GREAT 99 11 Awesome!

Name: Christopher Kiff Ms. Knopf – Algebra II Date: 10/25/17

Unit 4 Quiz – Complex Numbers

1) **Directions:** Fill in the blanks with the correct value.

a. $i^2 = -1$ ✓
b. $i^3 = -i$
c. $i^4 = 1$ ✓
d. $i^{17} = i$
e. $i^{23} = -i$
f. $i^{99} = -i$
g. $i^9 = i$ ✓
h. $i^{31} = -i$ ✓
i. $i^1 = i$
j. $i^0 = 1$
k. $i^{59} = -i$
l. $i^{71} = -i$
m. $i^{93} = i$ ✓
n. $i^{80} = 1$
o. $i^{43} = -i$

Multiple Choice Questions

Identify the choice that best completes the statement or answers the question. Write your answer on the given line.

2) Simplify the radical expression $\sqrt{-9}$ — D
A) ± 3
B) $-i\sqrt{3}$
C) $-3i$
D) $3i$
$i\sqrt{9} = 3i$

3) Which power of i is not equal to one? — C ✓
A) i^{16}
B) i^{32}
C) i^{26}
D) i^{49}

4) The sum of $\sqrt{-9} + \sqrt{-16}$ is equal to — B
A) 5
B) $7i$
C) $5i$
D) 7
$3i + 4i = 7i$

5) Simplify the radical expression $\sqrt{-200}$ — D
A) $10\sqrt{2}$
B) $-10i\sqrt{2}$
C) $-10\sqrt{2}$
D) $10i\sqrt{2}$
$i\sqrt{200}$
$i\sqrt{100}\sqrt{2}$
$i10\sqrt{2}$
$10i\sqrt{2}$

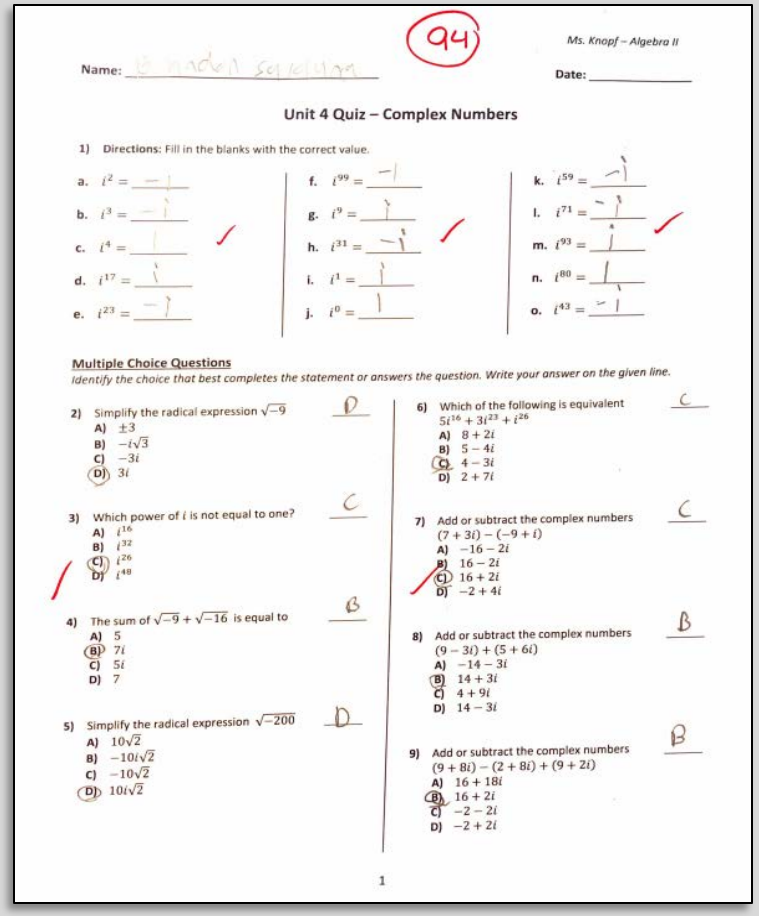
6) Which of the following is equivalent $5i^{16} + 3i^{23} + i^{26}$ — C
A) $8 + 2i$
B) $5 - 4i$
C) $4 - 3i$
D) $2 + 7i$
$4 - 3i$

7) Add or subtract the complex numbers $(7 + 3i) - (-9 + i)$ — C ✓
A) $-16 - 2i$
B) $16 - 2i$
C) $16 + 2i$
D) $-2 + 4i$
$16 + 2i$

8) Add or subtract the complex numbers $(9 - 3i) + (5 + 6i)$ — B
A) $-14 - 3i$
B) $14 + 3i$
C) $4 + 9i$
D) $14 - 3i$
$14 + 3i$

9) Add or subtract the complex numbers $(9 + 8i) - (2 + 8i) + (9 + 2i)$ — B
A) $16 + 18i$
B) $16 + 2i$
C) $-2 - 2i$
D) $-2 + 2i$
$16 + 2i$

1



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Name: Student selection Ms. Knopf – Algebra II Date:

Unit 4 Quiz – Complex Numbers

1) **Directions:** Fill in the blanks with the correct value.

a. $i^2 = -1$
b. $i^3 = -i$ ✓
c. $i^4 = 1$
d. $i^{17} = i$
e. $i^{23} = -i$
f. $i^{99} = -1$
g. $i^9 = i$ ✓
h. $i^{31} = -i$ ✓
i. $i^1 = i$
j. $i^0 = 1$
k. $i^{59} = -i$
l. $i^{71} = -i$ ✓
m. $i^{93} = i$
n. $i^{80} = 1$
o. $i^{43} = -i$

Multiple Choice Questions

Identify the choice that best completes the statement or answers the question. Write your answer on the given line.

2) Simplify the radical expression $\sqrt{-9}$ — D
A) ± 3
B) $-i\sqrt{3}$
C) $-3i$
D) $3i$

3) Which power of i is not equal to one? — C
A) i^{16}
B) i^{32}
C) i^{26}
D) i^{49} ✓

4) The sum of $\sqrt{-9} + \sqrt{-16}$ is equal to — B
A) 5
B) $7i$
C) $5i$
D) 7

5) Simplify the radical expression $\sqrt{-200}$ — D
A) $10\sqrt{2}$
B) $-10i\sqrt{2}$
C) $-10\sqrt{2}$
D) $10i\sqrt{2}$

6) Which of the following is equivalent $5i^{16} + 3i^{23} + i^{26}$ — C
A) $8 + 2i$
B) $5 - 4i$
C) $4 - 3i$
D) $2 + 7i$

7) Add or subtract the complex numbers $(7 + 3i) - (-9 + i)$ — C
A) $-16 - 2i$
B) $16 - 2i$
C) $16 + 2i$
D) $-2 + 4i$ ✓

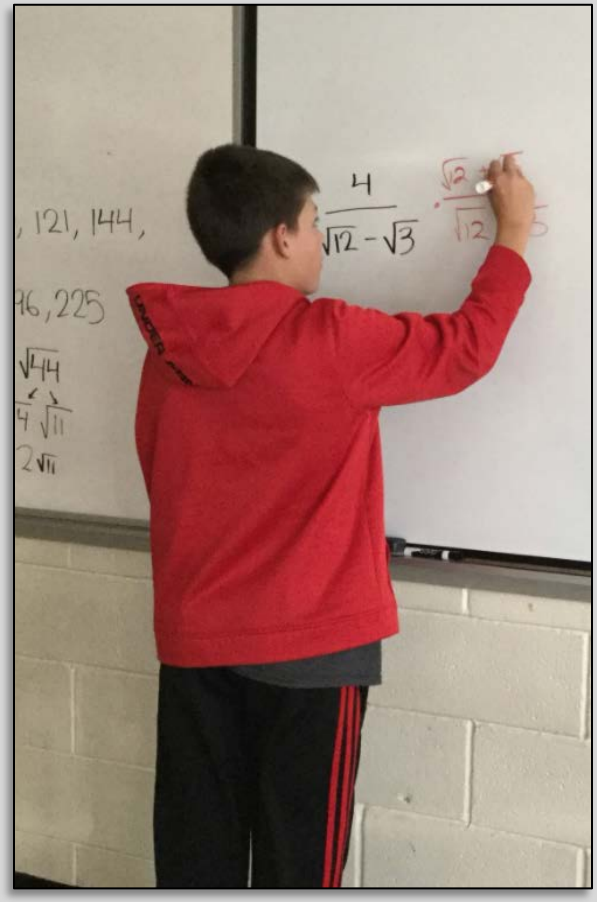
8) Add or subtract the complex numbers $(9 - 3i) + (5 + 6i)$ — B
A) $-14 - 3i$
B) $14 + 3i$
C) $4 + 9i$
D) $14 - 3i$

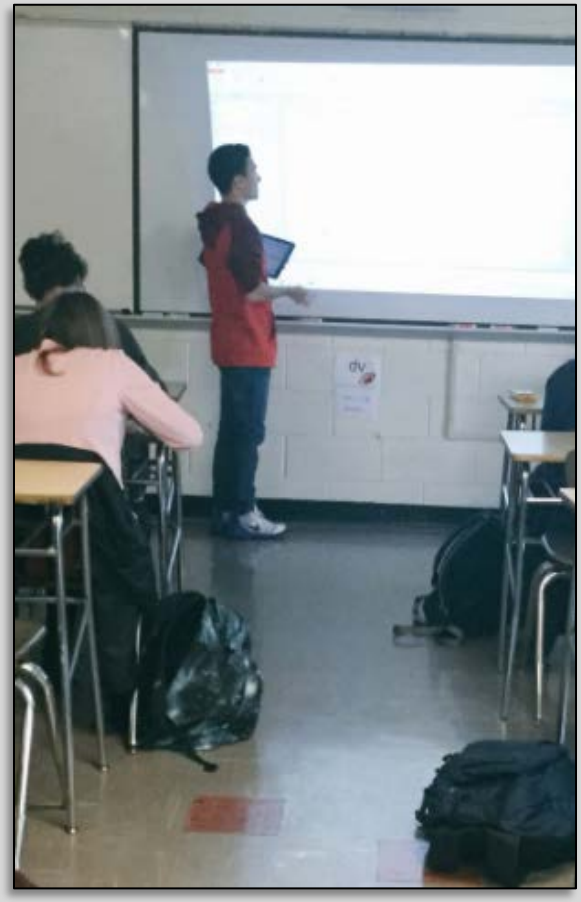
9) Add or subtract the complex numbers $(9 + 8i) - (2 + 8i) + (9 + 2i)$ — B
A) $16 + 18i$
B) $16 + 2i$
C) $-2 - 2i$
D) $-2 + 2i$

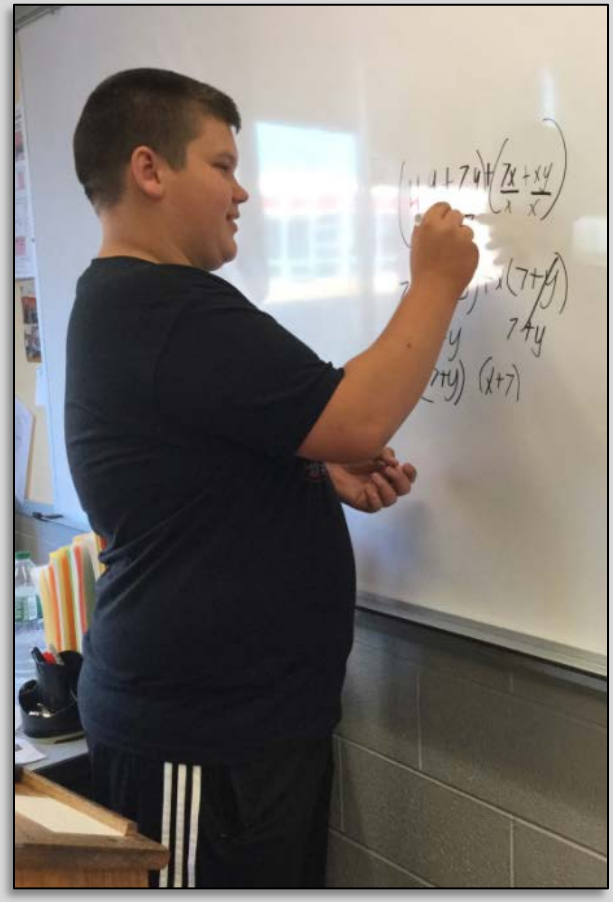
1

Evidence #5d: Students Teaching

Students showing what they know!







Evidence #6: Intervisitation/Coaching

criteria of quality assessment (4)	1. asks students to perform, create, produce, or do 2. incorporates multi-curricular areas and/or performance tasks 3. taps higher levels of cognition 4. invokes real world applications
Checking for Understanding (Monitor & Adjust)	a series of formative assessments used for the purpose of collecting feedback to determine next teaching steps
Critical Attributes of Montor & Adjust	(G-CAD) G - generate observable responses C - check the responses A - analyze the responses D - decide the next teaching steps
2 ways to check for understanding	1. create understanding - i.e. think, pair, share, mental movie 2. check the behavior - procedural/process (students do)
Key points of Monitoring & Adjusting	checks must be aligned to objective (IRAQ) all students demonstrate learning (100%) inspect all students (100%) feedback is immediate and specific

Evidence #6: Intervisitation/Coaching

R.A.M.P. Features

After you have implemented the learning check you will have gathered the data and know how to respond based on the student results.

R: Re-teach, when a high percentage of students give an incorrect response, re-teach all or part of the lesson.

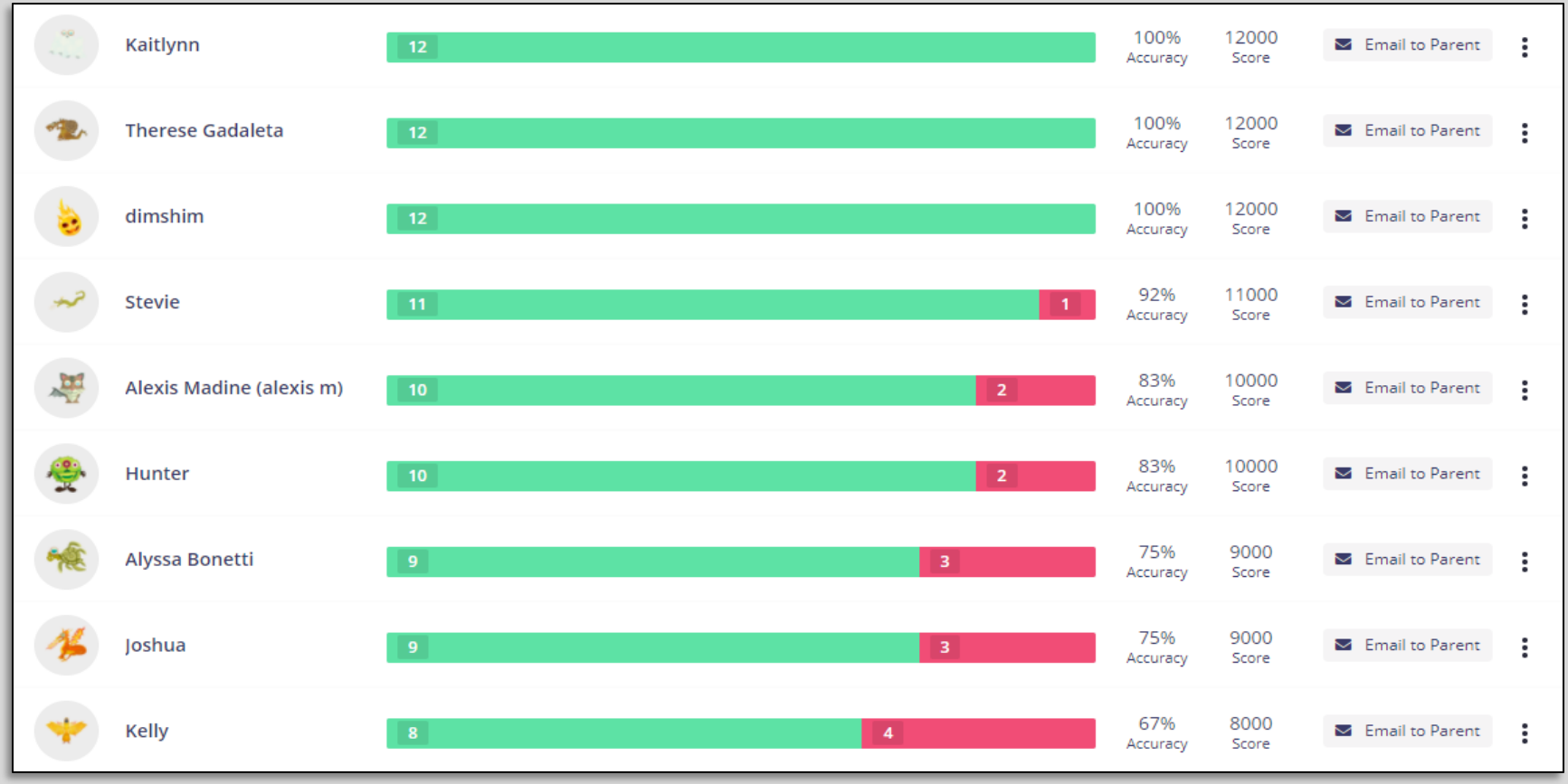
A: Abandon-for now. When a high percentage of students show frustration due to lack of prior knowledge, drop the current objective. Re-group to determine what students need for the lesson then Re-teach.

M: Move on - When a high percentage of students give a correct response.

P: Practice –When a high percent of students show basic understanding, but need additional practice or scaffolding to develop speed or accuracy, or a deeper understanding.

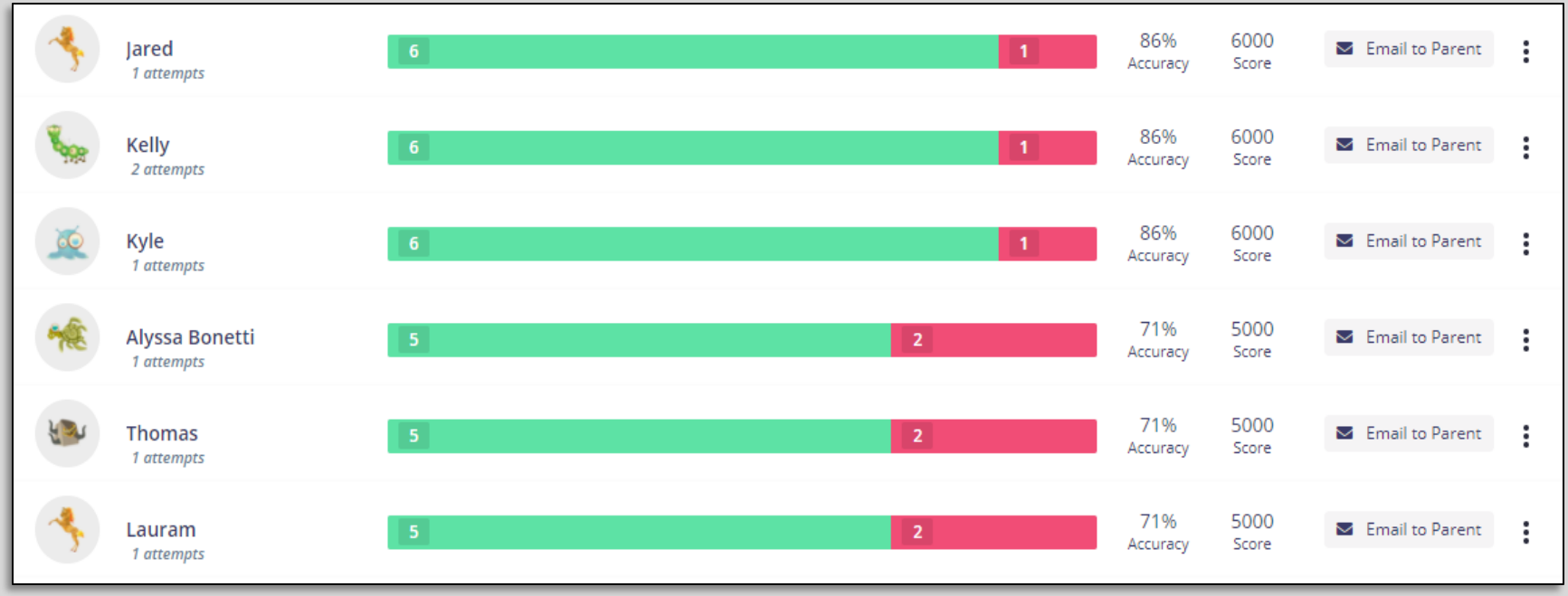
Evidence #7a: Classroom Data

Classroom data from Quizizz Classwork/Homework



Evidence #7a: Classroom Data

Classroom data from Quizizz Classwork/Homework



Evidence #7a: Classroom Data

Classroom data from Quizizz Classwork/Homework

Evidence #7b: Classroom Data

Classroom data from Mathspace Classwork/Homework

Results by Student

Name	Time	Grade	Progress	Q1	Q2	Q3
Bird, Jessica	1m	100%	3/3	✓	✓	✓
Broutzas, Vasilios	2m	83%	3/3	✓	✓	✓
Calvin, Furrsaun	3m	100%	3/3	✓	✓	✓
Canales, Aeve	2m	96%	3/3	✓	✓	✓
Cardoza, Tiffany	1m	100%	3/3	✓	✓	✓
Cestaro, Christian	0m	-	0/0			
Choudry, Riaz	2m	63%	3/3	✓	✓	✗
DaSilva, Domingos	1m	33%	3/3	✓	✗	✓
DosSantos, Johnathan	2m	58%	3/3	✓	✓	✗
Escobar Amador, Alejandro	0m	-	0/0			
Escudero Haldane, David	2m	67%	3/3	✗	✓	✗
Franz, Thomas	1m	100%	3/3	✓	✓	✓
King, Christopher	2m	83%	3/3	✓	✓	✓
Koski, Stephen	2m	100%	3/3	✓	✓	✓
Leighton, Kelly	0m	-	0/0			
Lippmann, Federico	1m	83%	3/3	✓	✓	✗
Mengler, Daniel	0m	-	0/0			
Pereira, Kyle	3m	83%	3/3	✗	✓	✓
Saravia, Donna	1m	75%	3/3	✓	✓	✓

Evidence #7b: Classroom Data

Classroom data from Mathspace Classwork/Homework

Results by Student

Name	Time	Grade	Progress	Q1	Q2	Q3	Q4	Q5	Q6	Q7
AlonzoSt Surin, Isaiah	0m	0%	1/7	○						
Bonetti, Alyssa	24m	82%	7/7	✓	✓	✓	✓	✗	✓	✓
Braun, Hunter	10m	100%	7/7	✓	✓	✓	✓	✓	✓	✓
Contreras Munguia, David	6m	57%	5/7	✓	✓	✓	✓	○		
Davila, Steven	17m	100%	7/7	✓	✓	✓	✓	✓	✓	✓
Gadaleta, Therese	7m	79%	7/7	✓	✓	✓	✓	✗	✓	✓
Granados, Elmer	11m	86%	7/7	✓	✓	✓	✓	✓	✓	✗
Hoyos, Jared	4m	14%	2/7	✓	○					
Kazmi, Hashim	6m	57%	7/7	✓	✓	✓	✓	✗	✗	✗
Machado, Laura	25m	86%	7/7	✓	✗	✓	✓	✓	✓	✓
Madine, Alexis	11m	57%	5/7	✓	✓	✓	✓	○		
Mundy, Joshua	17m	89%	7/7	✓	✓	✓	✓	✓	✓	✓
Pimenta, Christian	9m	43%	7/7	✗	✓	✓	✓	✗	✗	✗
Reuther, Lyndsey	0m	0%	1/7	○						
Rocha, Kelly	12m	57%	7/7	✗	✓	✓	✗	✗	✓	✓
Sabu, Emil	17m	71%	7/7	✗	✓	✓	✓	✓	✓	✗
Saldana, Brandon	0m	-	0/0							
Walters, Kaitlyn	7m	100%	7/7	✓	✓	✓	✓	✓	✓	✓

Evidence #7c: Classroom Data (Grades)

3rd Period
61.64% average

Unit 1 Test (...
09/19/2017
Tests
100
61.64
68.00
28.17
100
100
98
93
93
85
83
82
75
68
68
60
50
45
33
32
30
28
25
23
13

3rd Period
73.73% average

Unit 5 Test (...
11/17/2017
Tests
105
73.73
80.5
17.08
94
92
92
90
89
88
87
87
87
85
81
80
77
65
63
59
58
57
55
41
39

7th Period
74.67% average

Unit 1 Test (...
09/19/2017
Tests
105
74.67
81.50
19.13
103
100
93
92
88
87
86
85
83
80
72
70
63
57
55
48
42
40

7th Period
86.89% average

Unit 4 Quiz (...
10/25/2017
Quizzes
105
86.89
90.5
12.54
101
99
99
96
94
94
93
93
92
89
88
88
85
80
80
79
64
50

Evidence #8: Observation Write-up

Notes and Evidence:
03/14/2018 08:59 am: Students began the class by a completing a Do Now on Quizizz.
03/14/2018 09:04 am: Students worked on the the do now and raised their hand if they had questions.
03/14/2018 09:06 am: As students finished the Do Now, they opened exercise 8 on ebackpack.
03/14/2018 09:38 am: After students finished the classwork, they practiced on mathspace.

Notes and Evidence:
03/14/2018 09:06 am: Ms. Knopf circulated the room and answered students questions.
The use of Mathspace and Quizziz allowed Ms. Knopf to assess her students and collect data. These activities also allowed students to assess their own understanding.

Notes and Evidence:
03/14/2018 09:02 am: As students began to work on the Quizizz, Ms. Knopf reviewed how to find the reference angle in each quadrant.
03/14/2018 09:27 am: Ms. Knopf continued to question Domingos until he was able to answer the question.
03/14/2018 09:33 am: A student asked if the fraction would need to be simplified. Ms. Knopf took this time to explain how to use the calculator to simplify a fraction.

Areas of Strength:

Ms. Knopf planned a well thought out discovery lesson. During the lesson, students discovered the definitions of trigonometric functions. Ms. Knopf encouraged her students to understand the mathematical reasoning rather than simply memorizing the definitions of these functions. Throughout the lesson, Ms. Knopf built on students' prior knowledge to prove and evaluate the reciprocal functions. Ms. Knopf's use of Quizizz and Mathspace during the class allowed her to assess students' understanding and encouraged students' to self reflect on how well they knew the material.