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Math Journals: How to Use Daily Math Journals to Increase Student-Teacher Feedback and Communication

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- In this session, we will explore how to incorporate a daily math journal into your class. We will talk about how to use them to give daily, personalized feedback to all students, how we can use them for student self-assessments, and how we can use them as a tool for students to reflect on their understanding of the content.

- Question: turn to a neighbor and talk about how you give feedback to students in your class daily.

Math Journals: How I use them

- Stay in my classroom.
- Students pick them up at the beginning of class, look at feedback from last class, do exit problem in them at the end of class.

Date: _____ **Learning Target:**

Exit Problem/Question:

Rate of Mastery: _____

Do I need to come in and get extra help (circle one)? YES NO

Comments:

_____

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Exit Problem/Question:

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Do I need to come in and get extra help (circle one)? YES NO
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Date: _____ **Learning Target:**

Exit Problem/Question:

Rate of Mastery: _____

Do I need to come in and get extra help (circle one)? YES NO
Comments:

Exit Problem 9/25

Solve $3|2x - 1| + 5 = 20$

Learning Target: *I can solve absolute value equations*

Feedback!

- Student feedback: You get to check in with every student every day! Not every student will do their homework.
- Also, with big class sizes it is a nice way to check in with every student.
- Class feedback: You can see what trends, mistakes, etc… that are happening in the group, and you can adapt/address these in future lessons.

Date: 10/9/23

Learning Target: I can graph syst
of linear inequalit

Exit Problem/Question:

Good, but don't forget arrows

Rate of Mastery: 4

Do I need to come in and get extra

Comments:

Dashed

Date: 10/11/23

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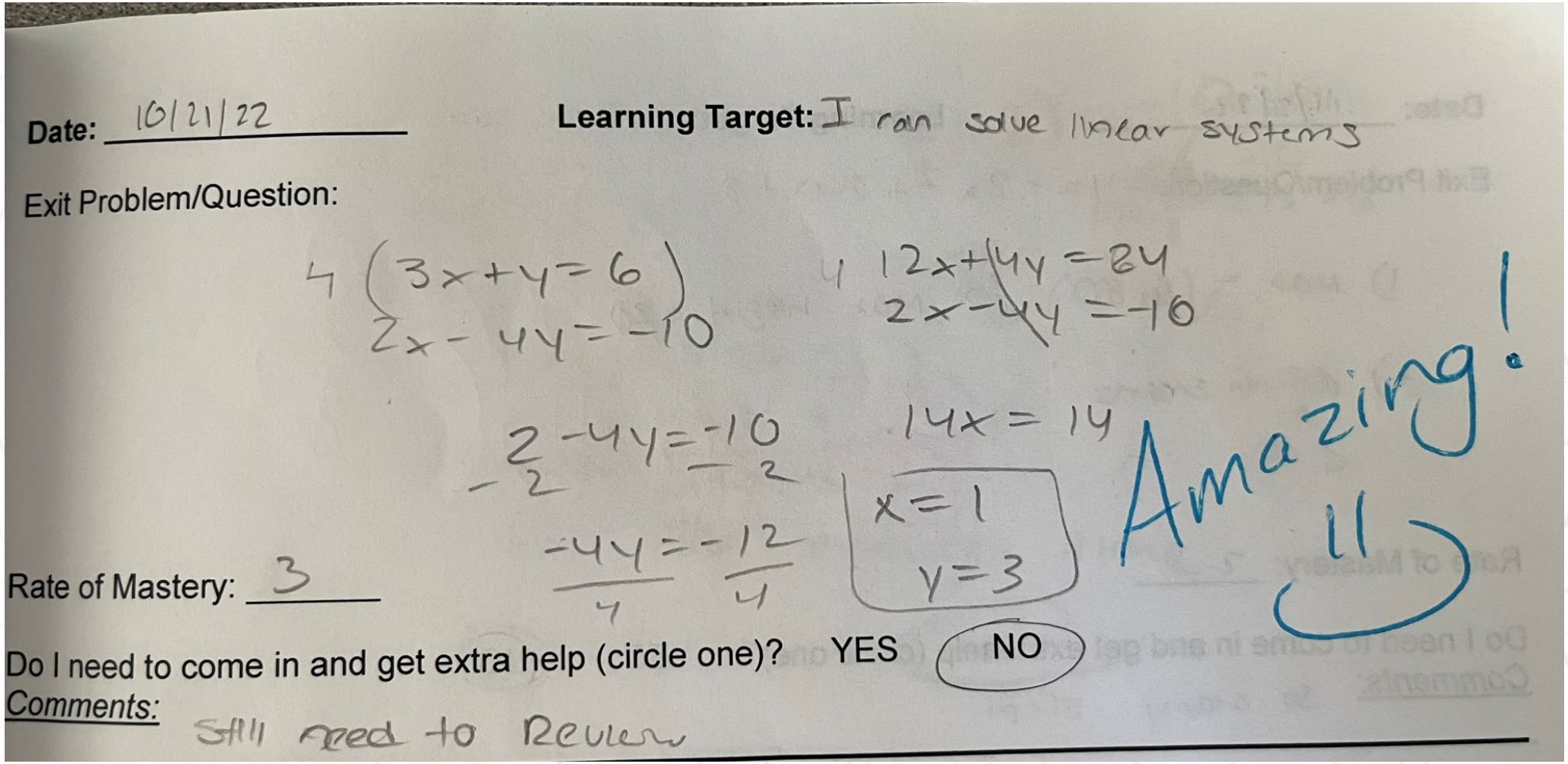
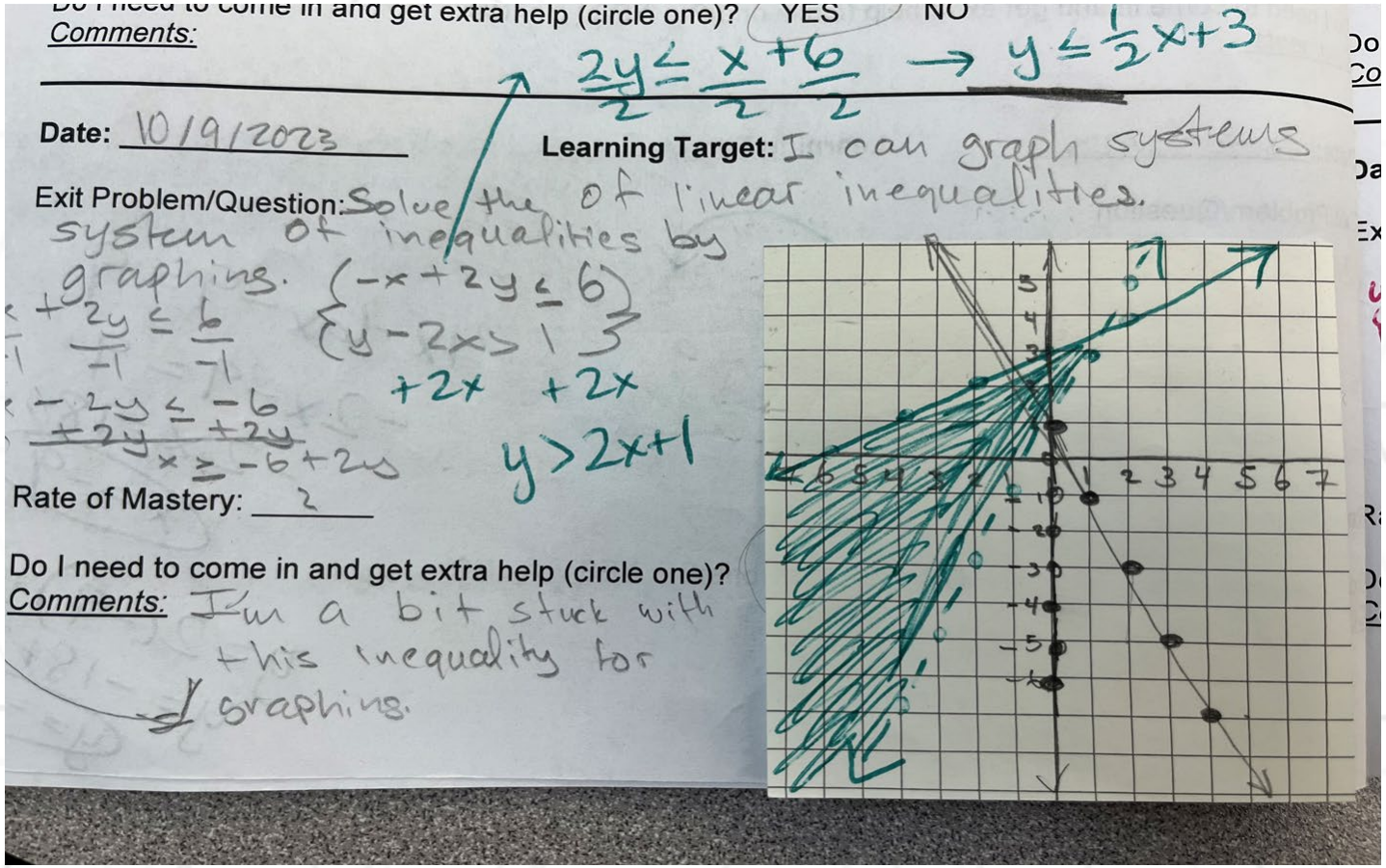

Date: 10/21/22
Learning Target: I can solve linear systems
Exit Problem/Question:
4(3x+y=6)
2x-4y=-10
12x+4y=24
2x-4y=-10
-2 -2
-4y=-12
-4 -4
14x=14
x=1
y=3
Amazing!
Rate of Mastery: 3
Do I need to come in and get extra help (circle one)? YES NO
Comments: Still need to Review

Focus on Feedback

- Tell the students it isn't going near the gradebook; I want to give them feedback to help them.
- Tell them it is ok if they don't know how to finish, let me know where they are getting stuck.



Math Journals: Why do I use them

- To get a snapshot of your class and notice trends, common errors, gaps in previous knowledge.
- Check in with every student every day. Very hard to do in large classes.
- Early signs of students who may need additional help before a summative assessment.
- Give more inclusive options for learners to ask questions and leave comments

End of Unit review

- Great way to review for a quiz or a test.
- Students have a bunch of problems with feedback from the teacher all in one place.
- Exit Problem ideas: have them redo an exit problem from the unit that they missed.

Unit 2/3 Topics

2.1: Graphing Linear Inequalities (*Exit Problem on 9/27*)

2.2: Solving one variable inequalities (*Exit Problem on 9/21*)

2.3: Graphing Absolute Value Functions (*Exit Problem on 9/22*)

2.4: Solving Absolute Value Equations (*Exit Problem on 9/25*)

2.5: Families of Functions and Transformations (*Exit Problem on 9/26)*

3.1 Solving Systems by Graphing (*Exit Problem on 9/29*)

3.2: Solving Systems using Substitution (*Exit Problem on 10/2*)

3.3: Solving Systems using Elimination (*Exit Problem on 10/3*)

System of Equations Word Problems (*Exit Problem Question on 10/5*)

3.4: System of Linear Inequalities (*Exit Problem on 10/9*)

Date: 9/18 Learning Target:

Exit Problem/Question:

$f(-3) = -x^2 + 5x - 2$

$f(-3) = -(-3)^2 + 5(-3) - 2$

$= -9 + 15 - 2$

$= -26$

I got mistaken about the negative sign that still needs to be there when multiplied

Rate of Mastery: 5

Do I need to come in and get extra help (circle one)? YES NO

Comments:

Downside: Time!

- Grading: Make the problems medium level, not too difficult. You want to have the majority of students get it correct (easier to grade!)
- I put more of my effort into grading these than I do grading homework (I have students grade their own homework).
- If you don't have time to grade Math Journals one day, that is ok! Students can self grade the next day in class.
- Don't have an exit problem every day.

Date: 9/26/23 **Learning Target:** I can analyze families of functions

Exit Problem/Question:

the difference between $y=|x|$ and $y=-3|x+4|-2$ is that the vertex is lower by two points and shifted 4 to the left along with the range being 3 times as large

Rate of Mastery: 4

absolutely amazing work, near perfection!

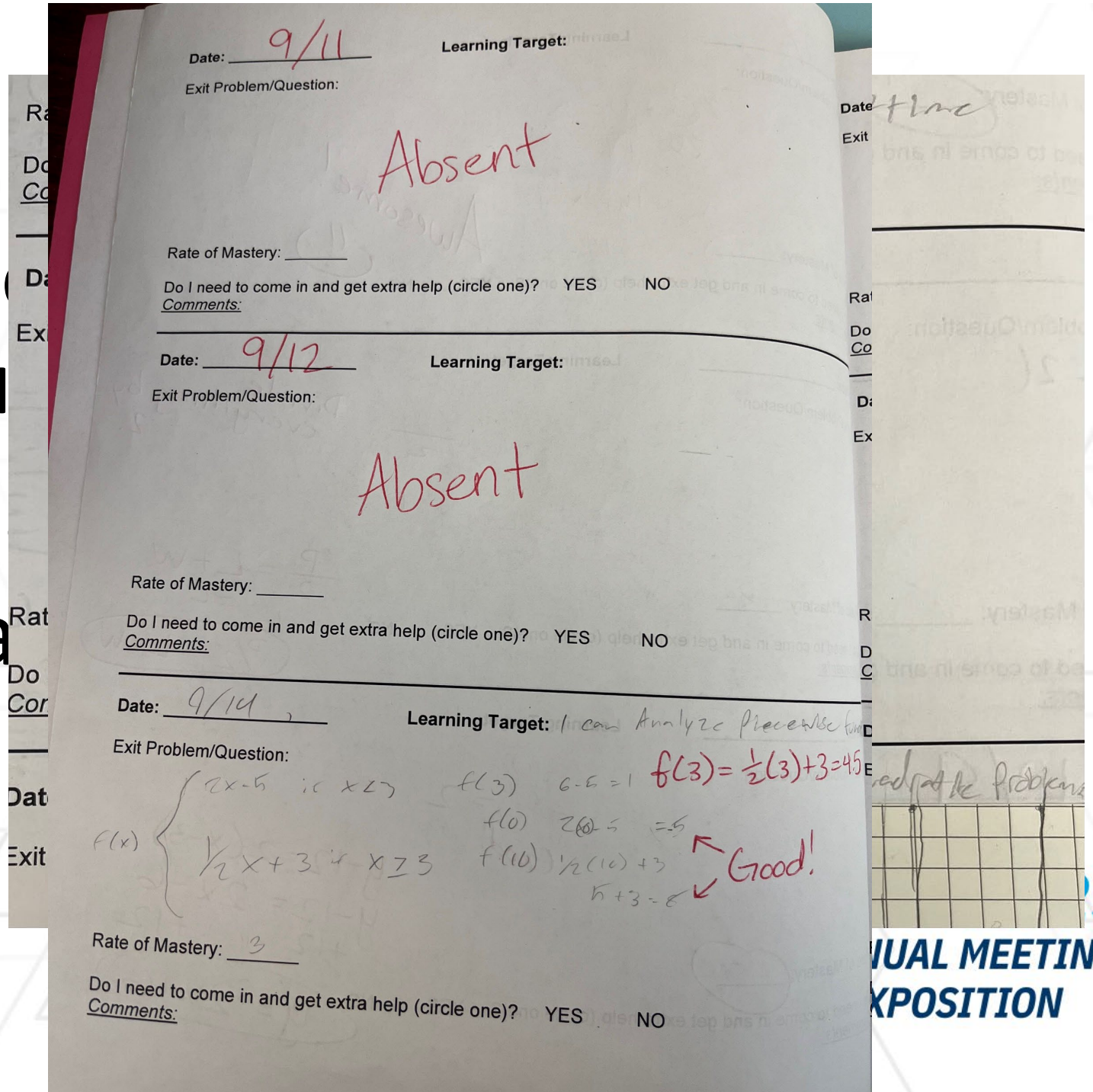
Do I need to come in and get extra help (circle one)? YES (NO)

Comments:

↑ So true!

Great for evidence!

- Evaluations if y
  evidence of stu
- National Board
- Any meetings a



Tips for implementing

- Pick a problem that isn’t super difficult.
- Give about 5 minutes at the end of class for it.
- Encourage comments and respond to comments.
- Have students get in the habit of interacting with their math journal feedback daily.
- Notice trends, address in class the following day (Warm-ups)
- If you are too busy to grade them, that is ok!

Questions?

- Thank you for coming!
- Feel free to email me if you have any questions or if you have any great ideas on how to implement math journals into your classroom.
- Jill.Jacobs@kent.k12.wa.us