

Lesson Plan

STEP 1: Heading

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| Date: | 10/25/18 |
| Teacher(s) Name: | Meagan Wentworth |
| Grade Level(s): | 8th Grade |
| Title of Lesson: | Solving Absolute Value Equations |
| Content Area(s): | Pre-Algebra |

STEP 2: Lesson Goal(s) – Stage 1

Identify what students will understand, know or be able to do.

Students will be able to solve and graph equations involving absolute value.

Students will be able to write equations with absolute value when given the solutions.

STEP 3: Links to Curriculum Standards – Stage 1

Access district curriculum framework or state standards.

8.2.4.6

Represent relationships in various contexts with equations and inequalities involving the absolute value of a linear expression. Solve such equations and inequalities and graph the solutions on a number line.

STEP 4: Introduction – Essential Questions

How will you capture the students' attention and access relevant background knowledge?

They will begin the morning by doing a daily dozen. This simply is 12 problems regarding basic math that is a warm up for their brain. After, we will correct homework from the night before and the daily dozen. I will then go over any questions they may have regarding the homework. After all of this, they should be ready to start the lesson for the day.

STEP 5: Teaching Presentation – Lesson Structures

Includes input, modeling and activities. Include at least one higher-level question that you will use during the lesson. Remember the structuring of a lesson: mini-lesson, mini-lecture, turn-and-talk, strategy lesson, etc.

I will do two examples on the board. They are the same type of problem as the previous day, only there is one extra step in the algebra. This will cause what they already know to shift slightly, but should be very doable. For example, there is now a coefficient out front, which causes the distance to no longer be correct on the graph. However, although the graph is no longer 100% accurate with the distance, the answer does not change and there are no added steps.

Here is an example:

$$|2x - 3| = 15$$

The 2 out front affects the distance, but the equation is still solved exactly the same and ends with two answers.

After the two examples, I will pass out the homework assignment and give a large amount of work time. I will also remind them to do the hardest problems first, so that they can ask questions while they are still at school.

STEP 6: Lesson Modifications and Adaptations – Stage 3

How will the input or activities be modified for at-risk learners or adjusted for high achieving students?

For at-risk learners, the assignment is able to be shortened so that it is less overwhelming. There are also options for different environments to work in, so that they are able to focus better. For higher achieving students, it is possible to give them a more challenging assignment.

STEP 7: Formative Assessment of Learning Goal – Stage 2

How will I know if students are meeting the goal? How will students self-assess their understanding?

I will know if students are understanding the material based on how they do on their homework assignments. Students will self-assess by seeing if they are able to answer the questions and do the examples given in class. If they are completely stuck on their assignment, this too is an indicator that they are not understanding the material for themselves.

Homework (If applicable) Homework should deepen student's skills level or understanding related to the lesson goal.

Homework will be a double-sided worksheet with problems of all varieties based on the lesson. There will be multiple of each type in an effort to give students practice with more than one problem.

STEP 8: Closure – Stage 1

Reviewing and clarifying the key points of a lesson. Reflect on enduring understandings and essential questions.

I will close by telling students that this is the same material as the day before with only one added step. I am not asking for more from them and they will still answer in the same way. This will boost their confidence and prove to them that they already know what they are doing.