

## Plan, Implement, Explain

Throughout Algebra 1, your student will be using the Plan, Implement, Explain method. This is a problem-solving method that will help your student take a step-by-step approach to each problem they're presented with.

The steps that make up the Plan, Implement, Explain method are written right into the name, so it's easy for you and your student to remember that when problem solving they will: "Plan," "Implement," and "Explain."

**Plan** Plan how you will approach the problem.

- Examine the problem.
  - What is the problem asking you to do?
  - What information do you need to complete the problem?
- Create a plan to find a solution.
- Determine which math strategies apply.
- Decide what tools can be used.

**Implement** Implement your plan to complete the problem, then check your work.

**Implement**

- Use the plan to complete the problem.
- Show your work.
- Label important information.

**Check:**

- Verify the answer is complete.
- Make sure the answer makes sense.
- Substitute the answer into the problem using a calculator as needed.
- If your answer does not make sense, revisit your plan and try a different strategy.

**Explain** Explain why your answer makes sense for the given problem.

- Explain why your answer makes sense.
- Connect previous knowledge to new concepts.
- Name any mathematical properties used.
- For word problems, write the answers in a complete sentence.

The implementation and explanation of problem-solving work together. As students work through a problem, they should be able to explain each step as they perform it.

There are times when students will be asked to document all parts of this method. Other times, they may complete Plan and/or Explain in their minds.

Students should always read the directions for each problem carefully to see which parts of the method they must show.

As you can see, the Plan, Implement, Explain method is a great way to help your student learn how to approach problems.

But if this feels like a lot to remember, don't worry. Your student will be shown how to use this method for different problem-types throughout Algebra 1. And as your student progresses, they may be asked to only show one or two of the steps.

The goal of Plan, Implement, Explain is not that your student will write each step out for every single problem. The goal is to give them a foundation that makes problem solving more approachable.

As they gain confidence in their math journey they can use the parts of the Plan, Implement, Explain method that work best for them.