Questions to get students thinking:

· What mathematical reasoning leads from one line to the next?

• What mathematical notation is being used? What notation do you recognize? What notation is unfamiliar?

• What mathematical vocabulary is being used? What vocabulary do you know? What vocabulary is unfamiliar?

• Can you restate, in your own words, what the question is asking you to do? What would a correct solution to this problem look like?

- · What is the ultimate goal when solving this problem?
- · Without reading ahead, can you predict what the next line of math would look like?

• What type of problem is this? Is there a classification of problems that this example falls under?

• What is different about this example from other examples? What is similar about this example to other examples?

• Can you find other problems that this example problem supports?

• What definitions, theorems, or mathematical properties need to be applied to solve this problem?

- · What kind of real world situation might use this type of problem?
- · Can you think of another method that could be used to solve this problem?
- · Could you represent this problem with a model?
- · Could you generalize this process and teach others to solve problems like this?
- Under what circumstances will this solution (or strategy) work or not work?
- Interpret the meaning of your solution.
- How can the solution to this problem be verified? Is this solution reasonable?