

Cooperative Learning Roles based upon Standards for Mathematical Practices

Role: SMP #1 Leader

Make sense of problems and persevere in solving them

As SMP #1 Leader, I will:

- Explain what the problem means in my own words
- Encourage my teammates to persevere
- Continue to ask myself and others, “does this make sense?”

Role: SMP #6 Leader

Attend to precision

As SMP #6 Leader, I will:

- Ensure calculations are accurate
- Encourage the use of appropriate vocabulary
- Specify units of measure and label any diagrams to clarify meaning

Role: SMP #2 Leader

Reason abstractly and quantitatively

As SMP #2 Leader, I will:

- Create a clear representation of the problem
- Consider the units of measure involved
- Help my teammates to contextualize or decontextualize the problem

Role: SMP #3 Leader

Construct viable arguments and critique the reasoning of others

As SMP #3 Leader, I will:

- Listen to the conclusions of others and decide if they make sense
- Encourage my teammates to respectfully identify flawed logic
- Ask questions to clarify other ideas and conclusions

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Role: SMP #4 Leader

Model with mathematics

As SMP #4 Leader, I will:

- Identify important relationships in a problem
- Represent the relationship using tools
- Lead the discussion on whether the results make sense, improving the model if necessary

Role: SMP #5 Leader

Use appropriate tools strategically

As SMP #5 Leader, I will:

- Advocate for the appropriate tools from the teacher
- Encourage the correct use of tools
- Recognize when a tool might be beneficial in solving a problem

Role: SMP #7 Leader

Look for and make use of structure

As SMP #7 Leader, I will:

- Look closely to see a pattern or a structure in a math situation
- Break down a complicated problem into single objects
- Encourage my teammates to shift perspective if needed

Role: SMP #8 Leader

Look for and express regularity in repeated reasoning

As SMP #8 Leader, I will:

- Notice if calculations are repeated
- Look for a more efficient method to solve problems
- Lead the discussion on making a generalization based on results