Example 4: Problem-solving in groups
This example illustrates how class time can be structured for students to practice problem solving. Timing will depend heavily on the nature of the problems. This session may be especially well suited for conference and tutorials.

Before the session
- Assign students problems to solve. The type of problem you assign (e.g., case study, scenario, equation, experimental design question) will depend on your discipline. The number of problems you assign in this session may depend on the type of problem.
- Ask students to submit their solutions to you through the LMS. Ensure students are aware of the submission deadline by putting a link in the LMS calendar and/or posting an announcement in the LMS. Explain to students that this submission should be their best attempt and it will not be assessed. In class, students will work with peers to solve the problems. After class, they will have the opportunity to revise their solutions and resubmit them for assessment. Let students know that only submissions from students who submitted an initial 'best attempt' will be assessed. This condition should motivate students to submit their best attempt even though it will not be assessed.

During the session (~60 min)

Minutes	What	How	Details
5	Welcome and check-in	Type in chat or raise hand to speak*	Share with students how you're doing and allow students to do the same.
10	Problem 1: Peer feedback and brainstorming	Randomly assign students to breakout rooms[TA] in pairs or groups of three for peer feedback on their solutions. Students can orally describe their solutions or share text on their screens.	Ask students to get feedback from each other on their respective solutions and brainstorm alternative solutions. Depending on the problem type, it may be appropriate to provide students with questions to guide the peer feedback. (See guidelines for engaging students in peer feedback on pp. 7-10 of this resource document.)
15	Debrief	Report in chat or raise hand to speak*	With students back in the main Zoom room, ask for solutions and questions.
10	Problem 2: Peer feedback and brainstorming	Randomly assign students to breakout rooms[TA] in pairs or groups of three for peer feedback on their solutions. Students can orally describe their solutions or share text on their screens.	Ask students to get feedback from each other on their respective solutions and brainstorm alternative solutions.
15	Debrief	Report in chat or raise hand to speak*	With students back in the main Zoom room, ask for solutions and questions.
5	Wrap up and next steps		Let students know what to prepare for the next class meeting. Direct students to homework instructions in the LMS: They should revise their solutions and submit them through the LMS.

After the session
- Students revise their solutions and resubmit them for assessment.
- If you would like to keep a record of student interaction during the Zoom session, save the chat transcript in a folder related to your course.