(4 7 7) Organized by IKEA TPS  $\#3\frac{1}{2}$ : Team Puzzle Solving Matheam 2024

## 1 Team Round

- 1. An early  $19^{\rm th}$  century locomotive departs from the train station. Make sure that the engine does not explode. (5 7 7)
- 2. Determine the best kind of pork to use as deli meat. (3 7 7)
- 3. Figure out what the fundamental particles are that molecules are made of. (4 7 7)

## 2 Problem Round

- 4. Work together to sift through the broken stone left behind from a destroyed building. (4 6 7)
- 5. Your high school is organizing a dance party. Figure out the optimal assignment of couples for all of you to attend. (4 4 7)
- 6. It would be easier to work on this puzzle if you had a large flat surface supported by legs. IKEA provides products of this type, but most assemblies are designed for more than one person.  $(4\ 5\ 7)$

## 3 Solving Round

- 7. Triangle  $\triangle ABC$  is equilateral. That's super lame. Take turns saying rude and offensive things to  $\triangle ABC$ . (4 7 9)
- 8. Misha is running low on ideas for TPS. You should all come up with questions for him to use next week. (479)
- 9. As a group, arrange the questions on this handout in alphabetical order. (4 7 7)