



Problem Posing Pro-Forma:use of photographs

Assumption

A numerical or maths problem has multiple solutions or none, it is framed as an open-ended question. There is no clear path to the answer – students cannot easily use a formula. Within the problem, students are often given too much information or not enough



- 1. Activity Name: Height of the table. Bonus task: can you calculate the exact value for the height of the Moomin jar and heart decoration (it's not possible).
- 2. Expected duration of activity: 15-30 min
- 3. What EQF level is the activity (approximately)? EQF 2-4
- 4. What is the topic? Pair of linear equation, creative thinking
- 5. What are the Learning Outcomes? Explore methods to calculate the height of the table. How many ways is there to calculate it?
- 6. Prerequisite/prior knowledge assumed? Solving equations (not necessary because you can solve it without equations)
- 7. In what ways does the problem, or the way the problem is delivered to the students:
 - encourage critical way of investigating and thinking? No guidance is given so students are free to explore different methods to work out the process of solving this problem.
 - allow students to be creative? Yes, because the solution requires creative thinking.

- allow independent learning? Can be done individually
- allow for co-operative learning? Can be done also in a group
- allow students time to think? Students need time to work out their own strategy
- have a relevant or interesting context? Not a real life problem but develops creative thinking.
- allow for multiple ways of solving or investigating the challenge? There is multiple ways to solve the problem. You can use equations, deduction, proportion (this way doesn't give you the exact value).
- 8. Resources or materials required? Just the picture
- 9. What technology is required in the delivery of the problem? If you want that the students use Geogebra to solve it, you should distribute the picture. If not, just the picture on board is enough.
- 10. What technology might potentially be required in the solving of the problem? If you want, you can use Geogebra, but it's not necessary.
- 11. Suggestions for delivery