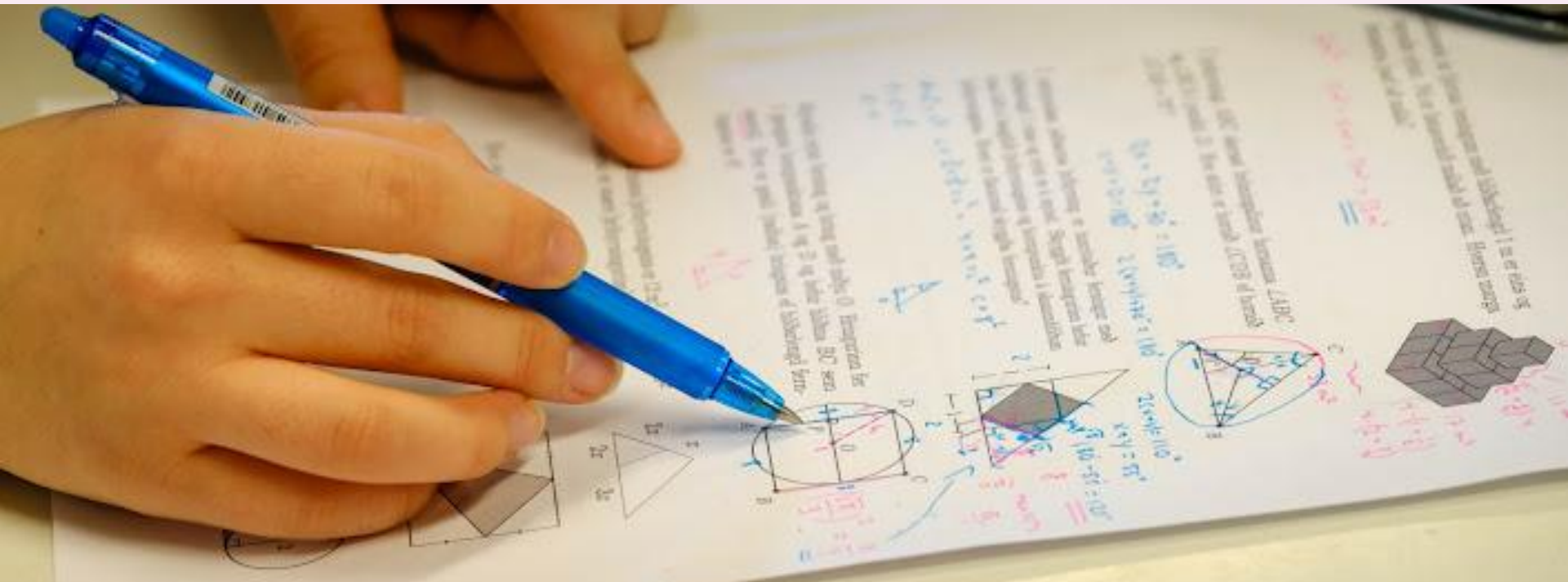


√ Problem = Solution?



Nanna Kristjánsdóttir

Base info

A sample of 686 students

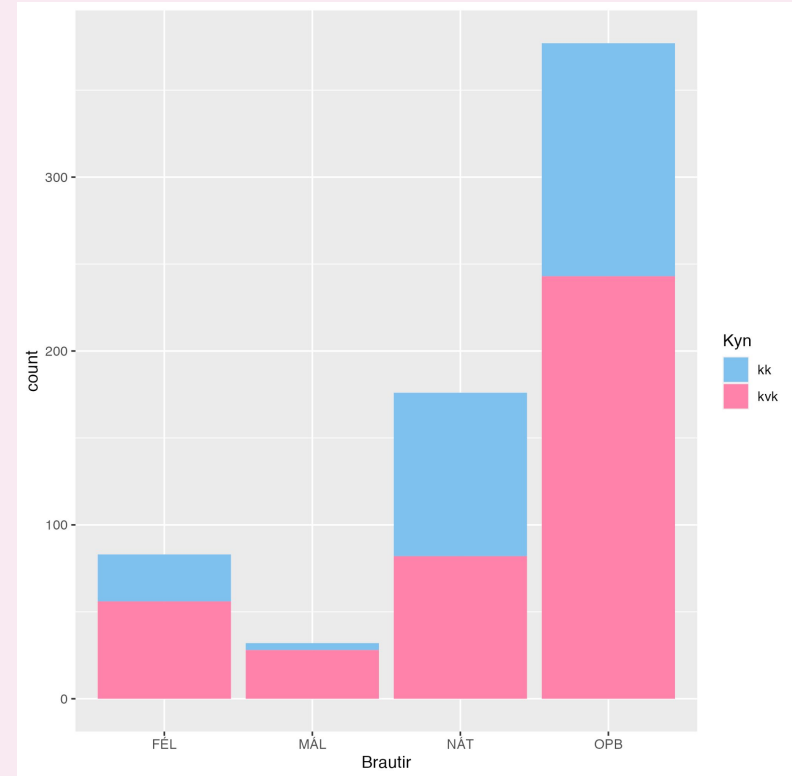
Students who began their studies at the fall of 2015, 2016, 2018, and 2019.

The school offers four main study-programs

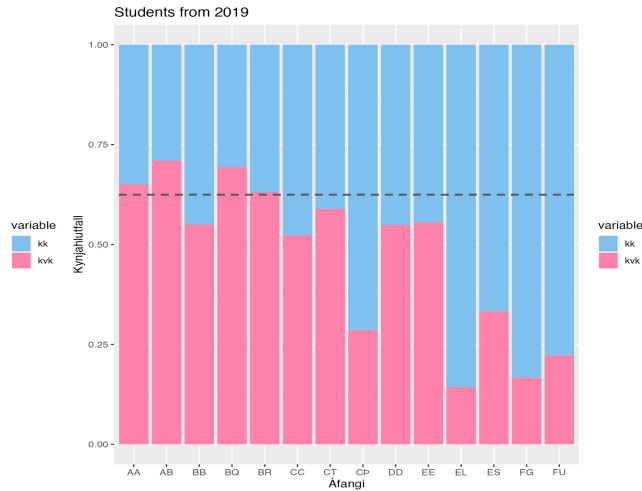
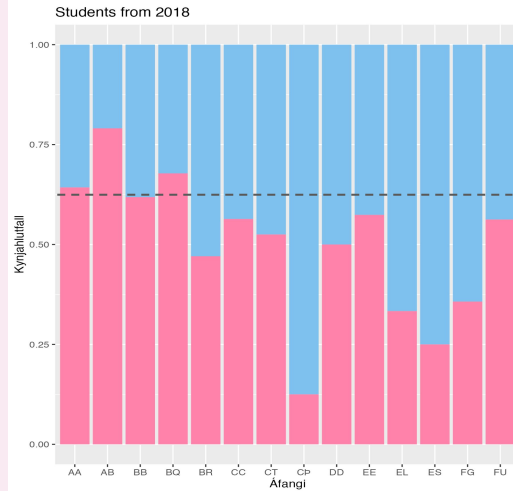
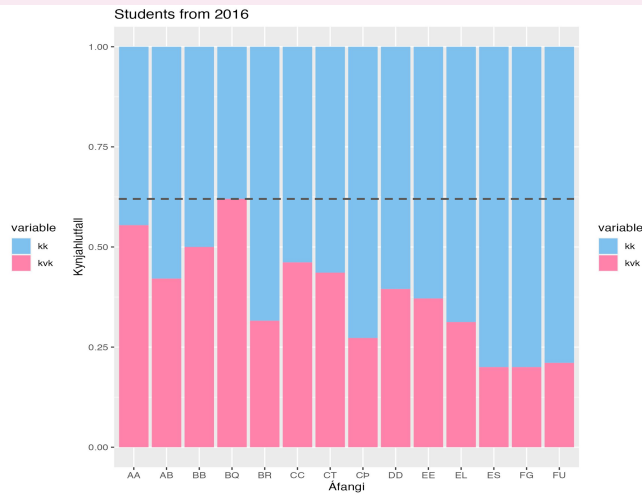
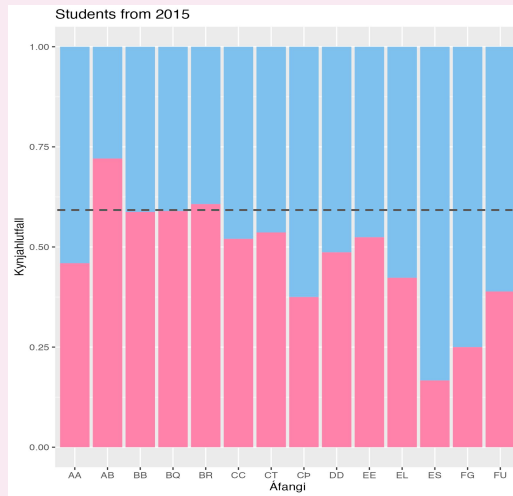
The gender ratio for girls and boys is 62:38

In the natural science program the ratio is 47:53

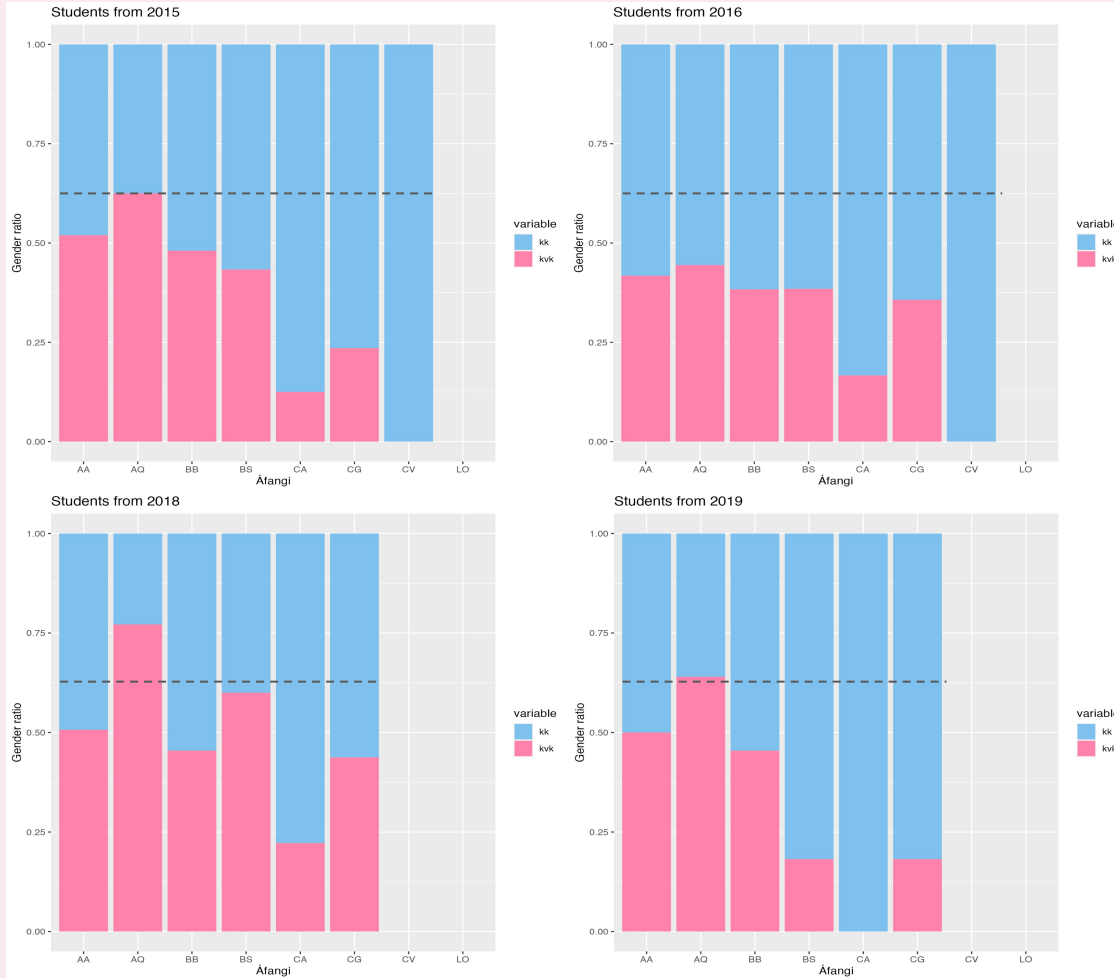
That means that 36% of boys choose the natural science program but only 19% of girls



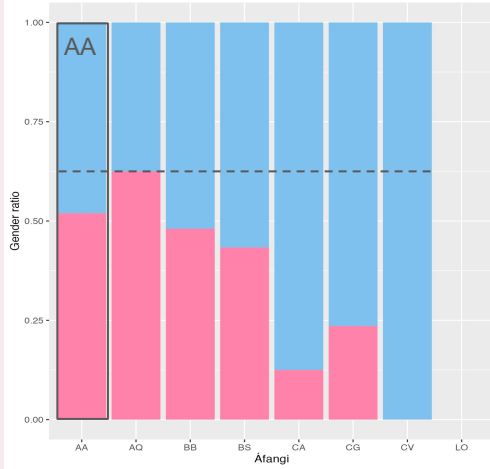
Gender ratio math



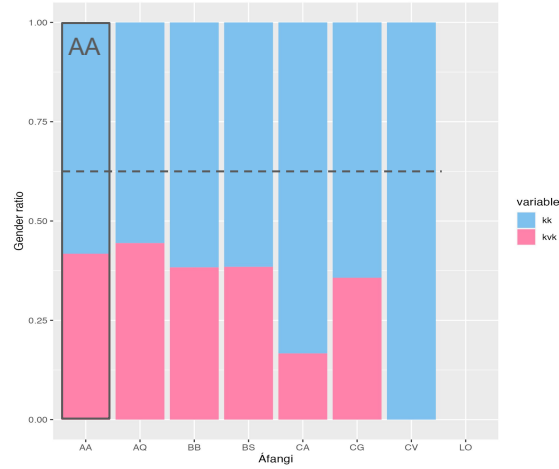
Gender ratio physics



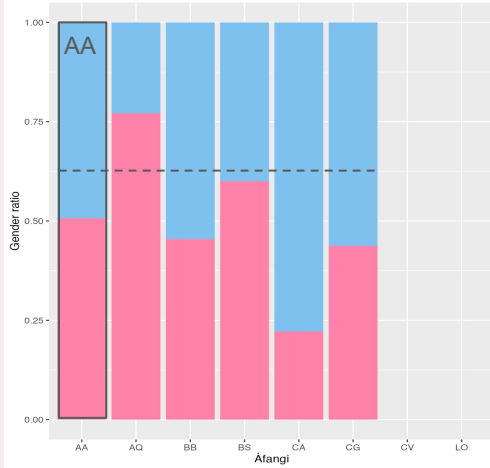
Students from 2015



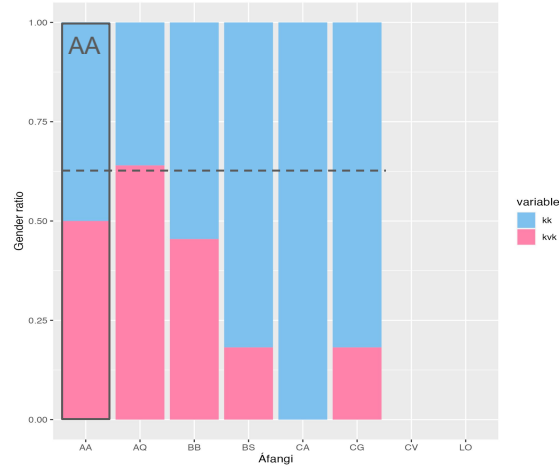
Students from 2016



Students from 2018



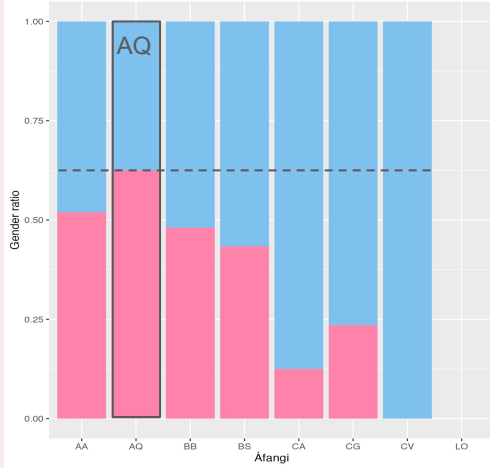
Students from 2019



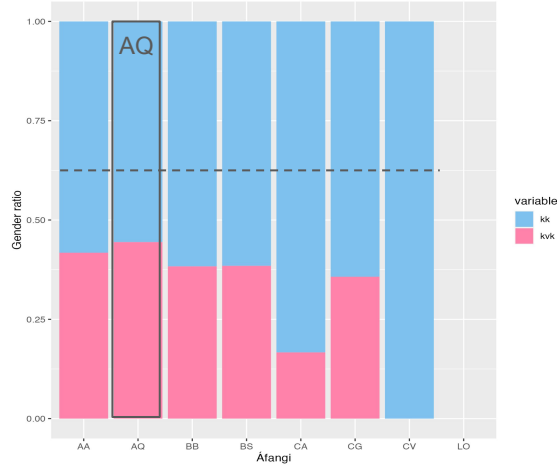
The courses

AA - Newtonian mechanics and thermodynamics

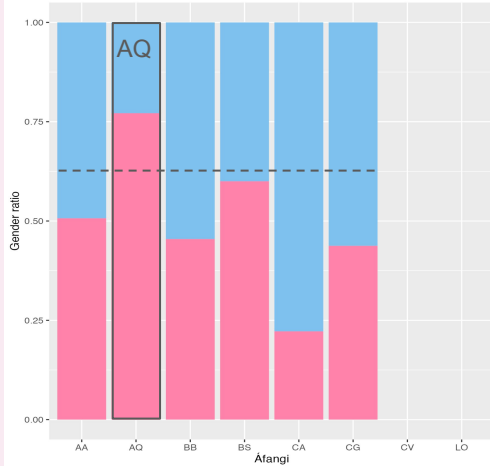
Students from 2015



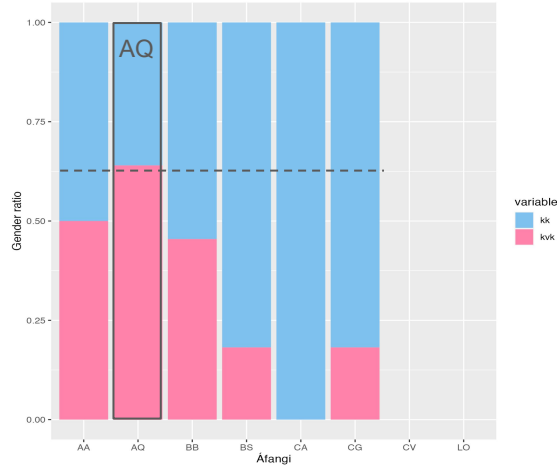
Students from 2016



Students from 2018



Students from 2019



The courses

AA - Newtonian mechanics and thermodynamics

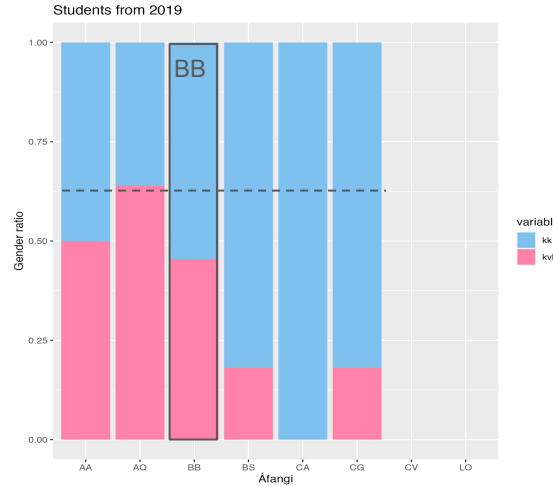
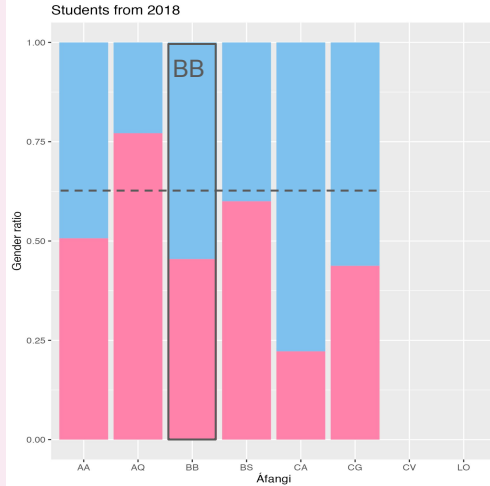
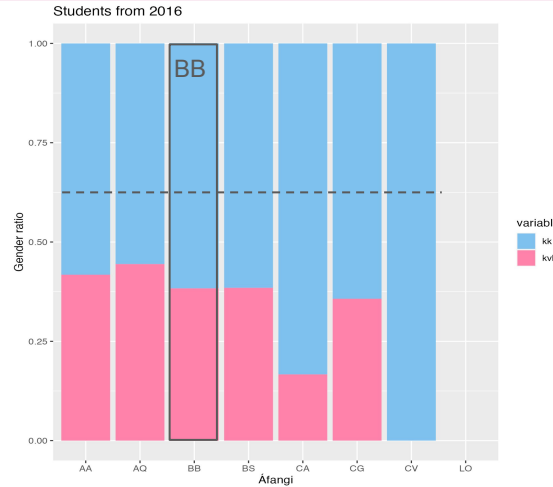
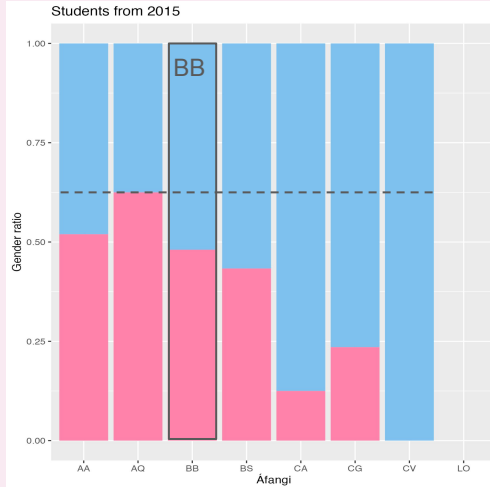
AQ - Physics for those who will not take more courses

The courses

AA - Newtonian mechanics and thermodynamics

AQ - Physics for those who will not take more courses

BB - Waves and electricity



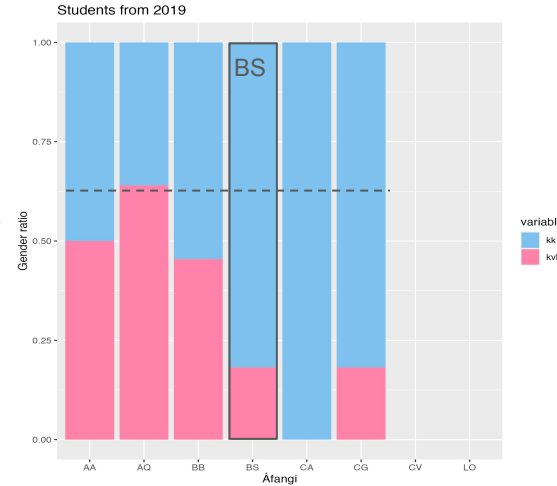
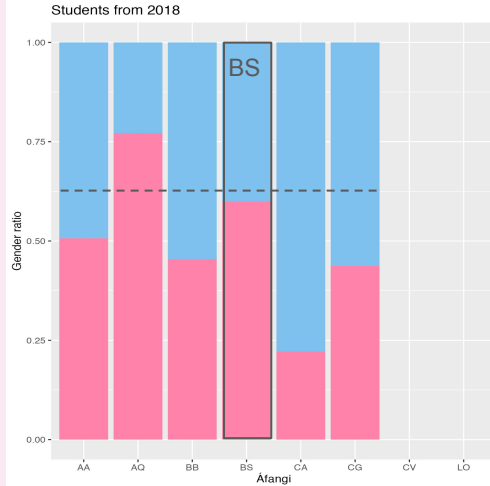
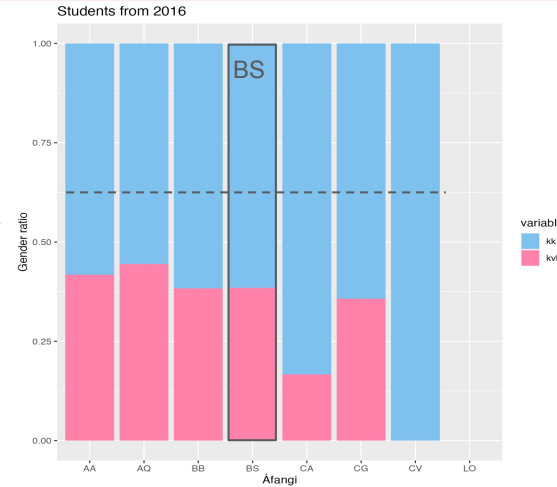
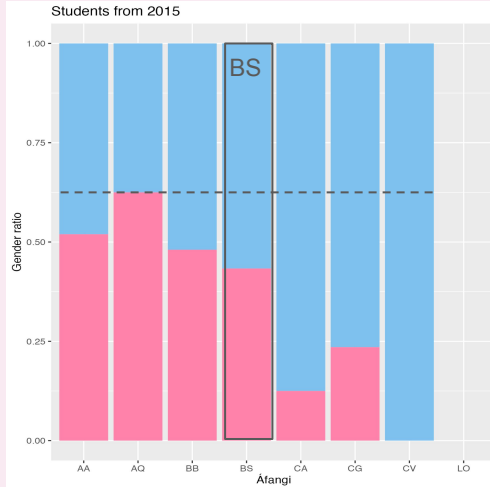
The courses

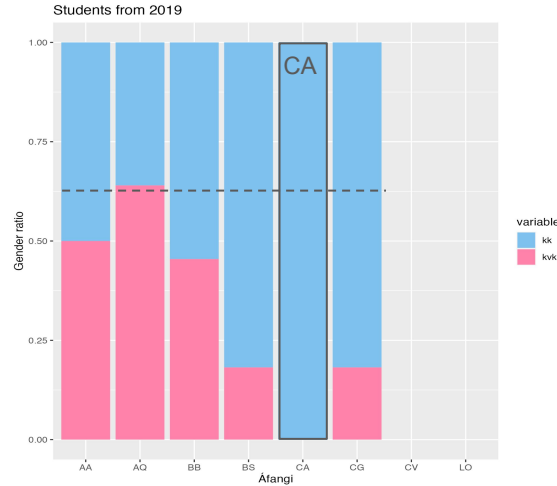
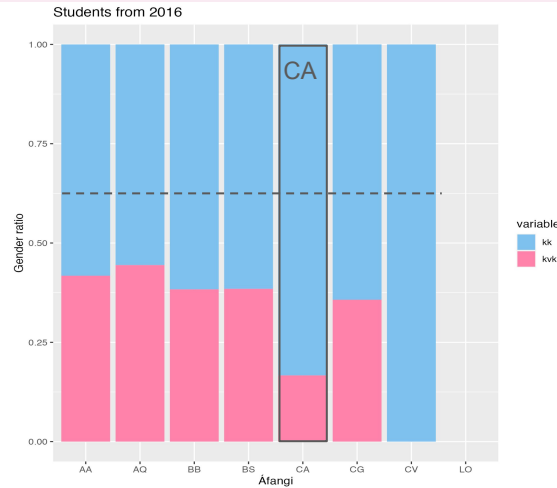
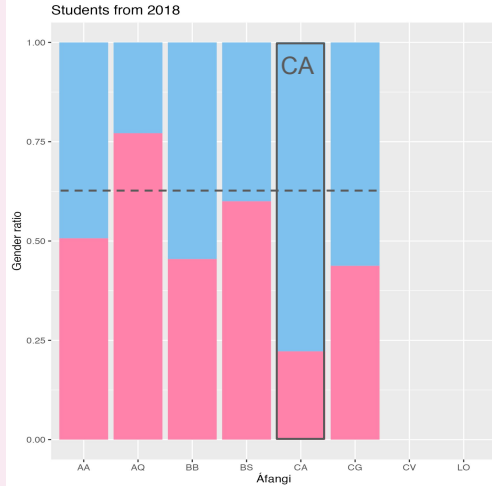
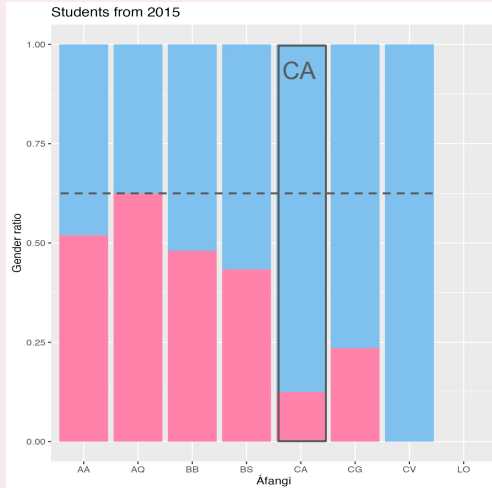
AA - Newtonian mechanics and thermodynamics

AQ - Physics for those who will not take more courses

BB - Waves and electricity

BS - Astronomy and astrophysics





The courses

AA - Newtonian mechanics and thermodynamics

AQ - Physics for those who will not take more courses

BB - Waves and electricity

BS - Astronomy and astrophysics

CA - Advanced mechanics and the theory of relativity

The courses

AA - Newtonian mechanics and thermodynamics

AQ - Physics for those who will not take more courses

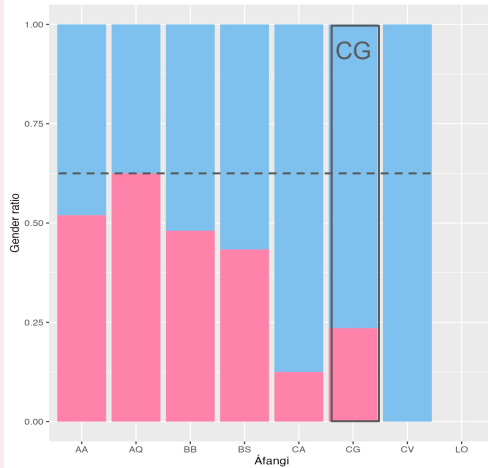
BB - Waves and electricity

BS - Astronomy and astrophysics

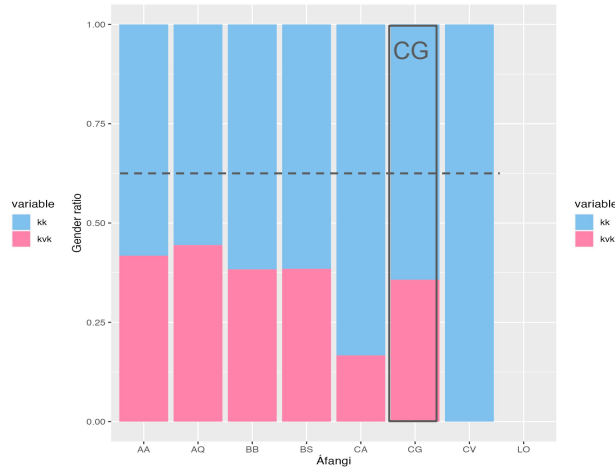
CA - Advanced mechanics and the theory of relativity

CG - Atomic and nuclear physics

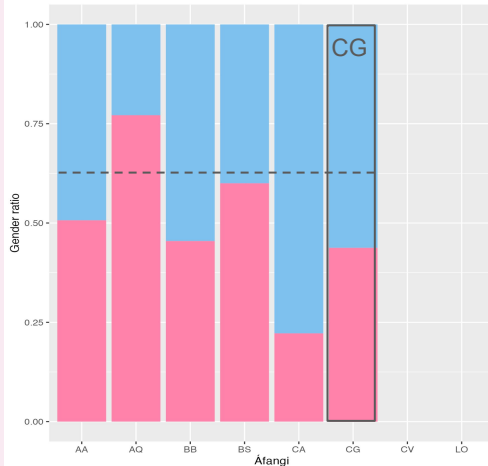
Students from 2015



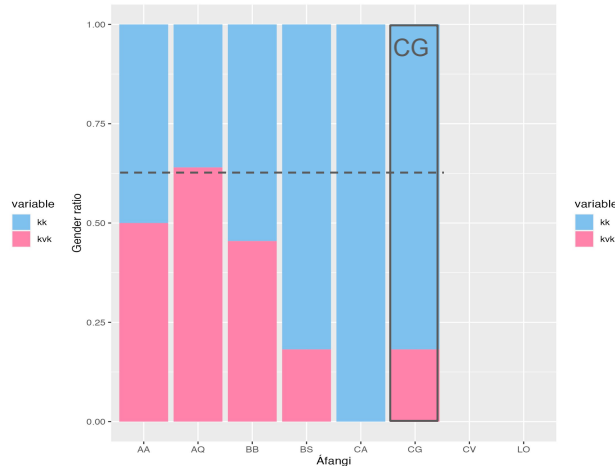
Students from 2016

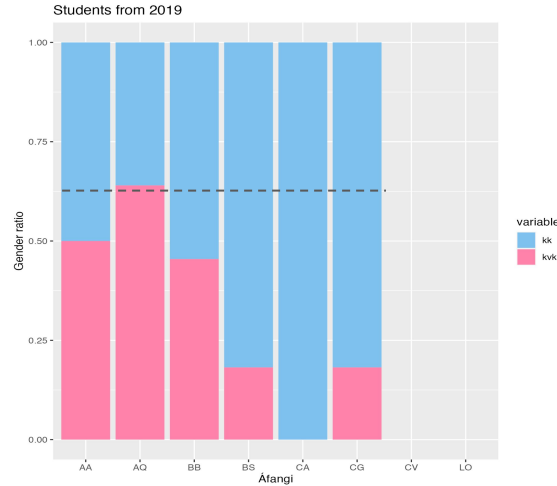
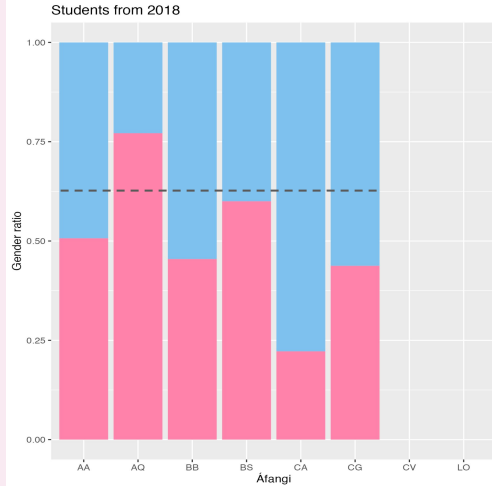
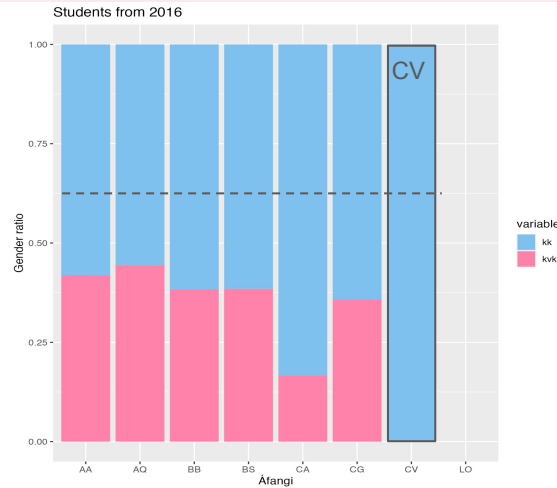
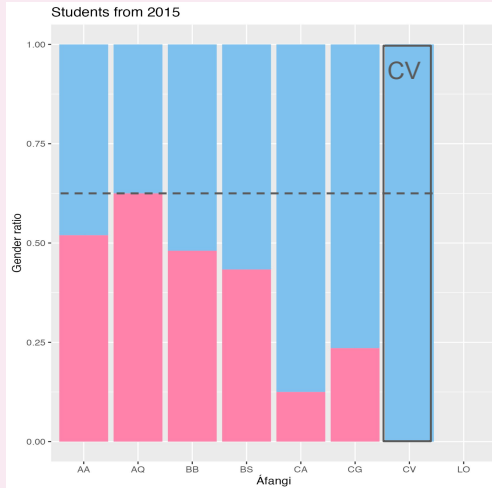


Students from 2018



Students from 2019





The courses

AA - Newtonian mechanics and thermodynamics

AQ - Physics for those who will not take more courses

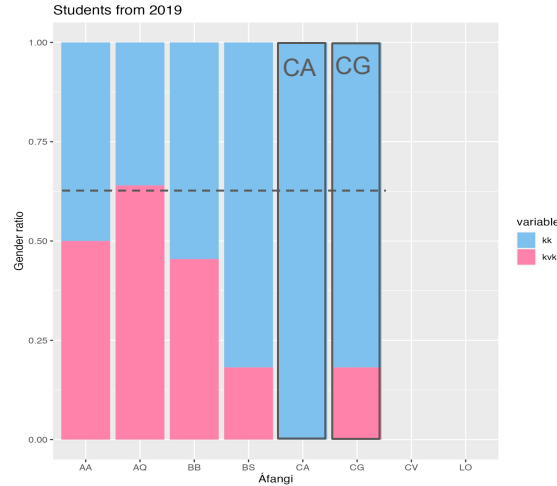
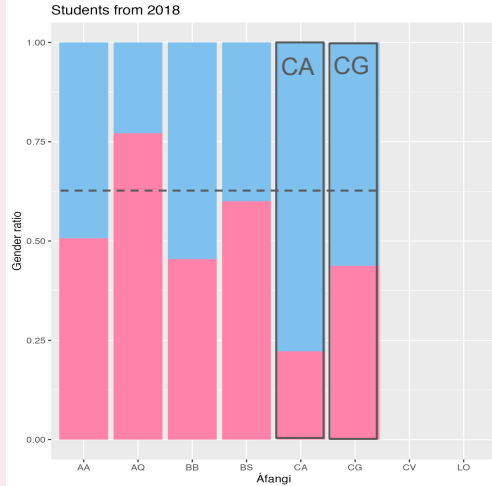
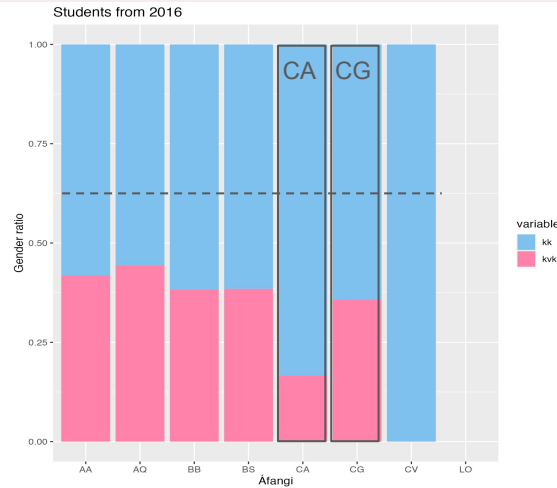
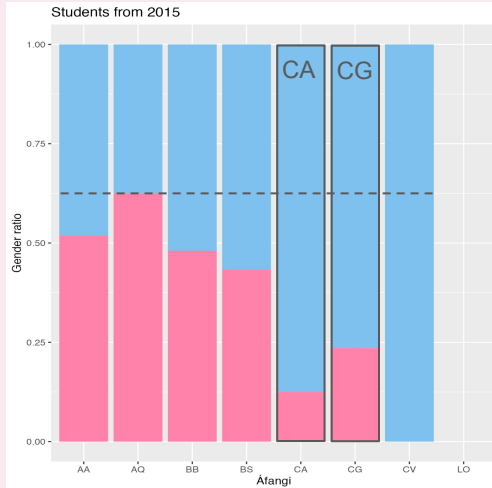
BB - Waves and electricity

BS - Astronomy and astrophysics

CA - Advanced mechanics and the theory of relativity

CG - Atomic and nuclear physics

CV - Overview and projects



The courses

CA - Advanced mechanics and the theory of relativity

$$\beta = 1.97$$

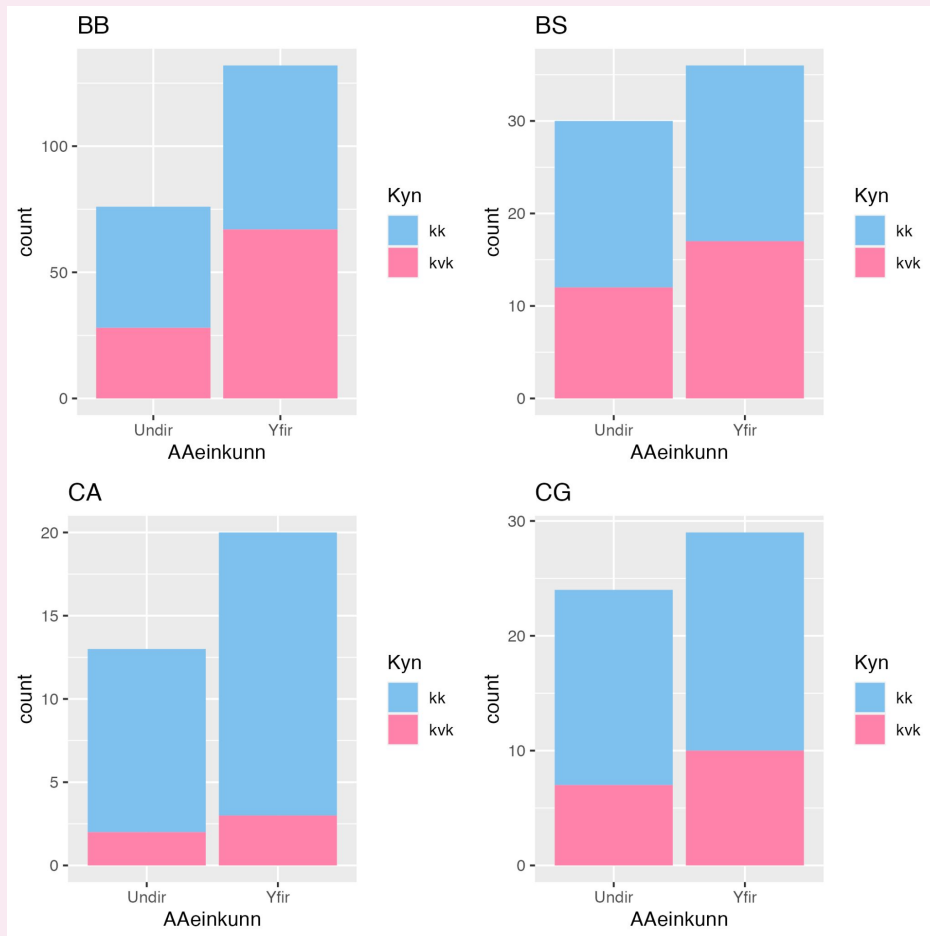
$$\exp(1.97) \approx 7.2$$

CG - Atomic and nuclear physics

$$\beta = 0.87$$

$$\exp(0.87) \approx 2.4$$

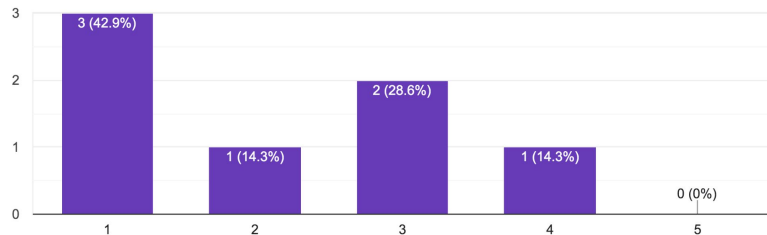
Number of students that took the more advanced courses and whether they were under/over the median grade in the first course (by gender)



Participants' responses

Ég á vinkonur sem ég get talað við um/deilt áhuga mínum á stærðfræði með

7 responses



Have you participated in the national mathematics competition? If not, why not?

„ No, I was too scared“

„ I was really busy, would've gone otherwise“

„ No, I probably wasn't ready since I only just started high school“

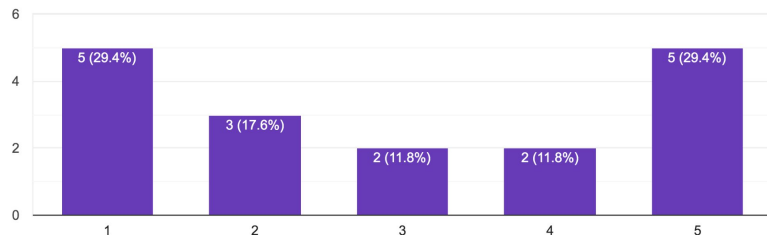
„ No, I'm not confident enough in my mathematics ability“

„ No, I didn't think I was good enough“

„ No, I didn't dare to do it“

Ég á vinkonur sem ég get talað við um/deilt með áhuga mínum á stærðfræði

17 responses



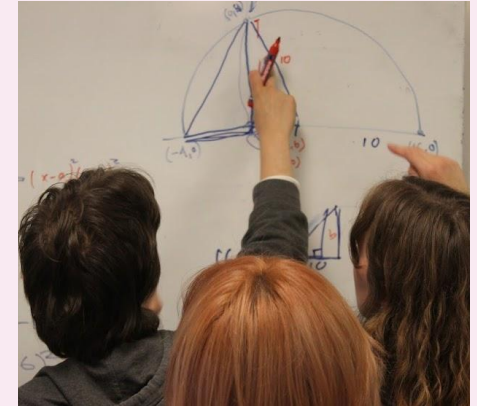


STELPUR DIFFRA

A summer camp in mathematics for female and gender-queer high school students in Iceland

Ideology behind Stelpur diffra

- Thinking Classroom (Peter Liljedahl)
 - Reading and Writing the World with Mathematics (Eric Gutstein, Paulo Freire)
- (Eric Gutstein, Paulo Freire)



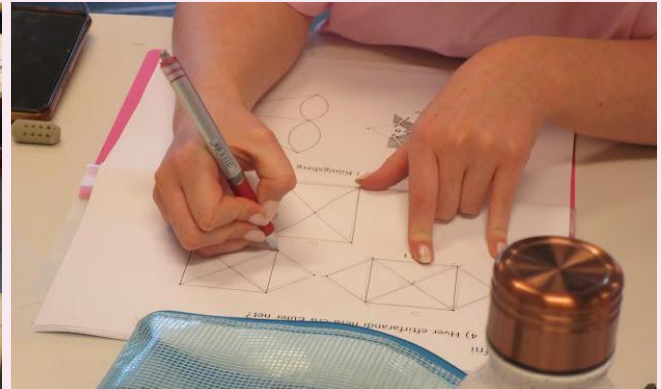
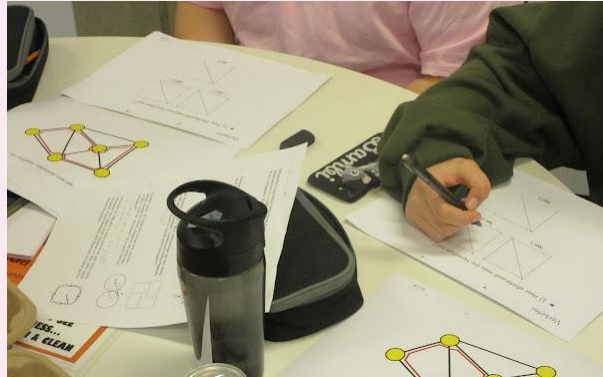
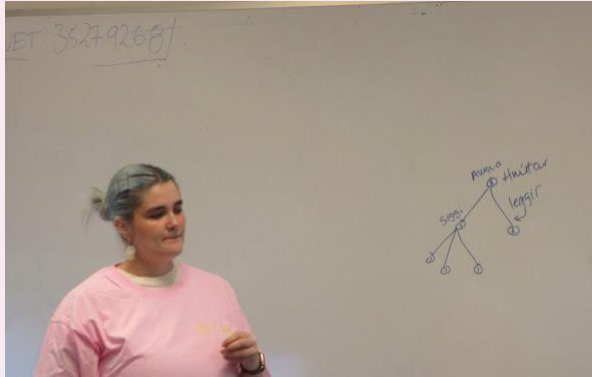
A typical day in the math camp



Stelpur diffra - Probability and data analysis



Stelpur diffra - Geometry and graph theory



Stelpur diffra - Probability, data analysis and a science trip!



How the math camps are set up! Typical schedule

STELPUR DIFFRA - námsbúðir í stærðfræði 9.-13. ágúst 2021

Háskóli Íslands - VR-II - stofa 148

	Mánudagur	Þriðjudagur	Miðvikudagur	Fimmtudagur	Föstudagur
09:00-9:30	Morgunkaffi á meðan þátttakendur mæta í hús	Morgunkaffi	Morgunkaffi - Anna Hrund	Morgunkaffi	Morgunkaffi og fyrirlestur um loddaraliðan (e. imposter syndrome)
09:30-10:00					
10:00-10:30	Kynning á búðunum og könnun lögð fyrir, hópefli	Talningafræði - Hulda Hvönn	Rúmfræði - Álfheiður Edda	Algebra - Íris Teresa	Stærðfræði sem verkfræði til að skoða heiminn
10:30-11:00					
11:00-11:30	Hádegismatur - Subway				
11:30-12:00					
12:00-12:30		Hádegismatur - Lemon	Hádegismatur - Junkyard	Hádegismatur - Mandi	
12:30-13:00					
13:00-13:30	Vinna saman í gamalli stærðfræðikeppni	Algoritmar - Nanna	Listasafnið - Bjarnheiður	Stærðfræði og listir - Jóa	Könnun og π -tsa
13:30-14:00					
14:00-14:30					Bíó!
14:30-15:00					



♡ Physics ♡

Ideas!



nanna@stelpurdifra.is



