



# Learning Platform

Learning the future, today!

Welcome

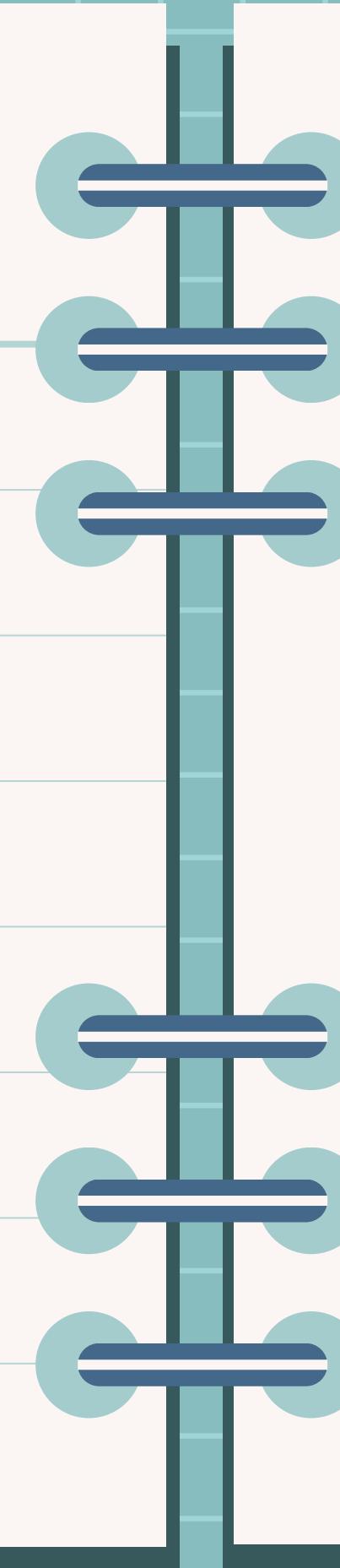
Hello and  
welcome to  
our Math &  
Portuguese  
Class!





EDA

# The Problem: Students' Performance in Portuguese and Mathematics



Let's analyze the performance of third-year high school students at a school in São Paulo, Brazil, called E.E. Alberto Torres.

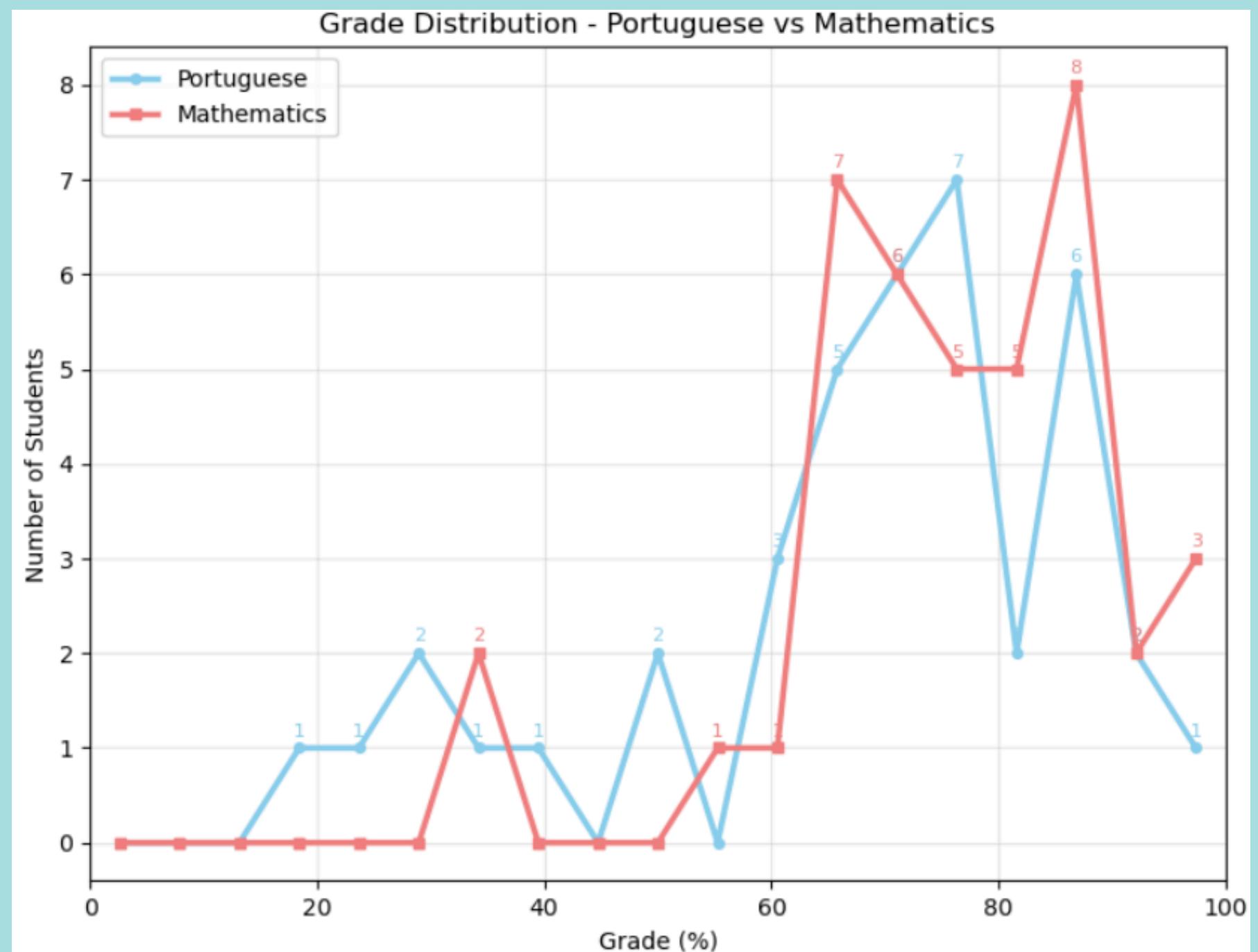
To comply with PII, the students' NAME and RA data are based on MOCK DATA.

EDA

# First Analysis

First, let's analyze the distribution of grades, both in Portuguese and in mathematics.

Our goal is identify the number of students and their respective performance in both subjects, observing their grades in each one.

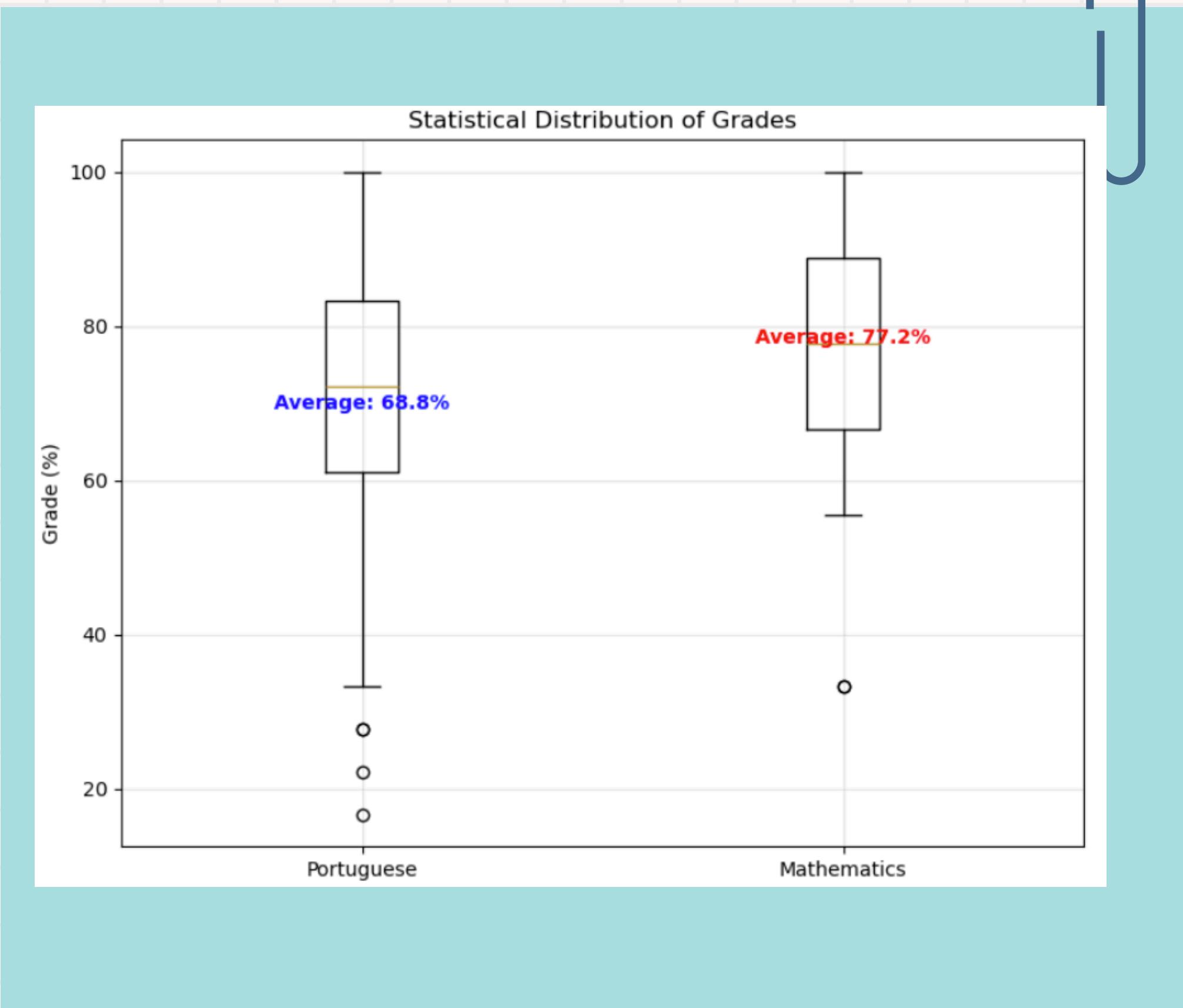


EDA

# First Analysis

First, let's analyze the distribution of grades, both in Portuguese and in mathematics.

We can see from this boxplot that the class average in Portuguese is 68.8%, while in mathematics it is 77.2%.



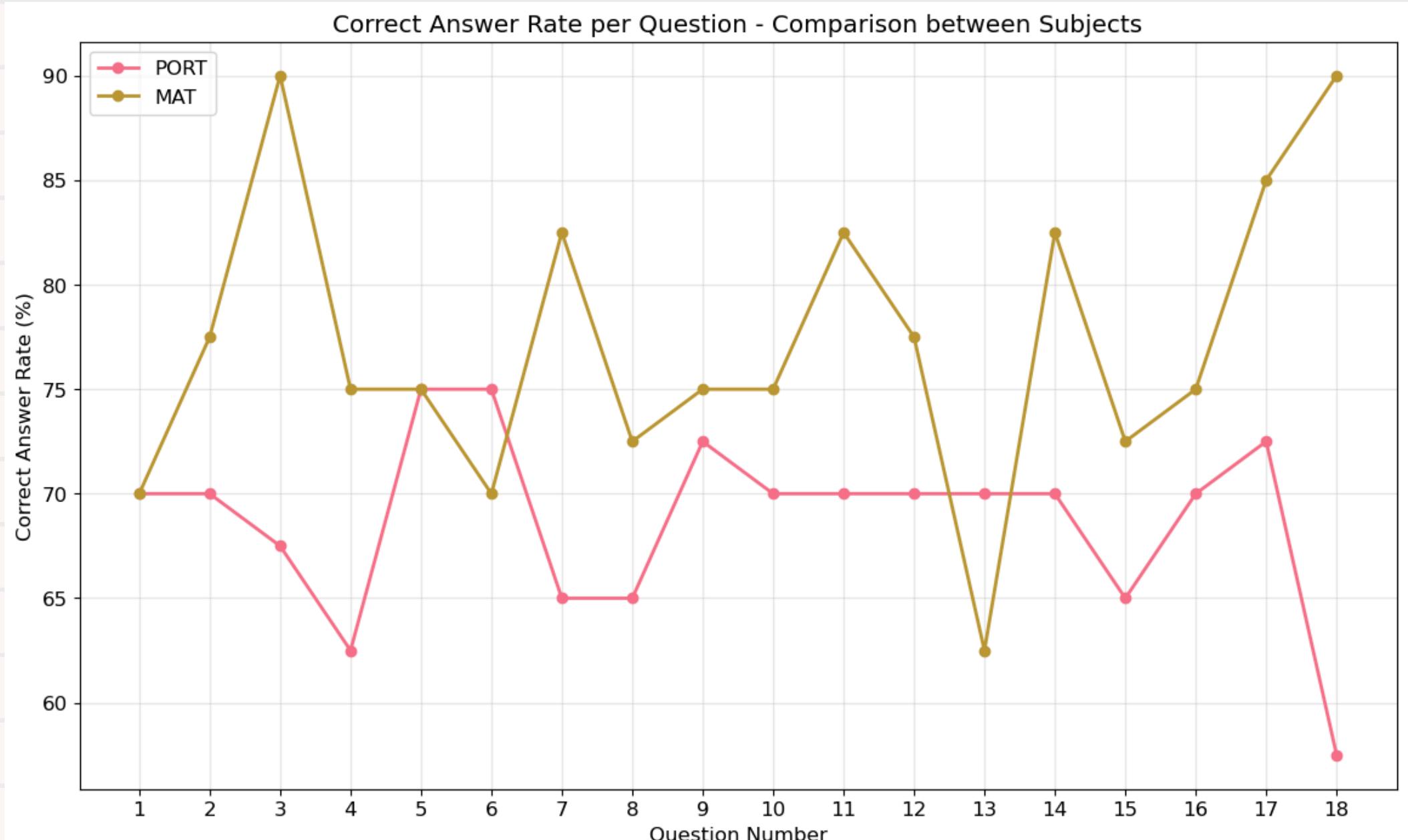
EDA

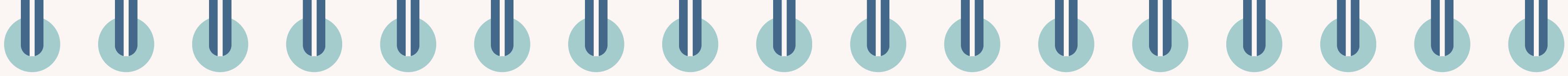
# Analyze by Questions

We are now examining student performance on each question to identify the most challenging ones.

Every difficult question represents an opportunity for growth. These insights don't just tell us where students are struggling.

They show us exactly where to focus our teaching energy for maximum impact."

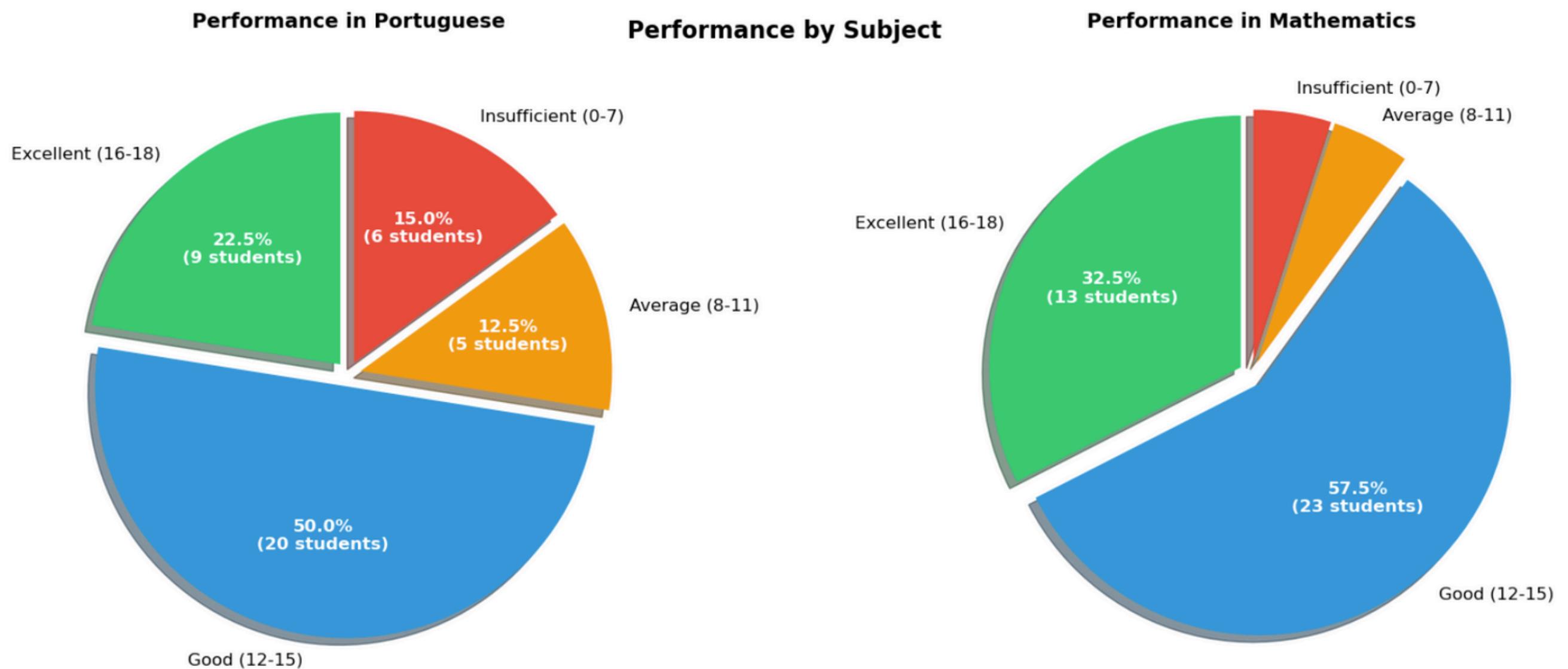




EDA

# Students Performance

Here we can get a general idea of student performance, with the goal of structuring personalized teaching plans.



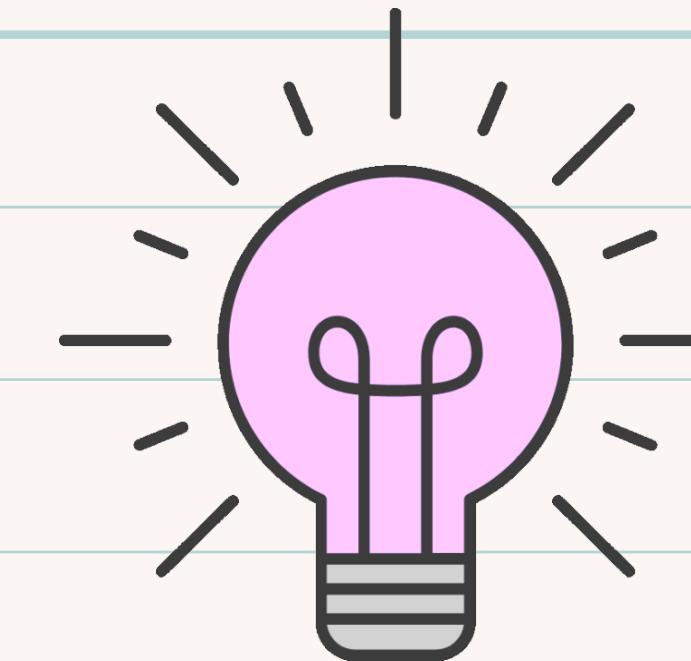
APP

**But what do  
we do with all  
this  
information?**

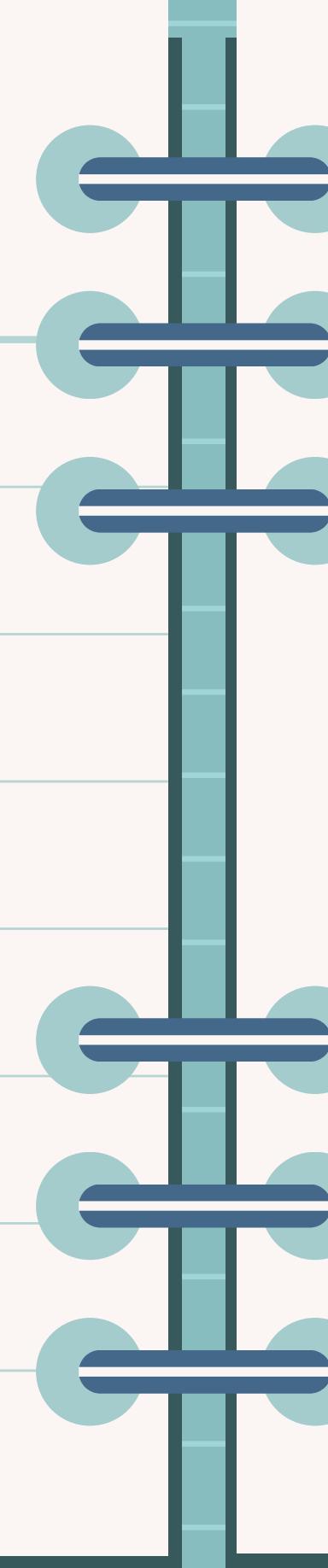




**APP**



# Learning Platform



## 1 Seeing The Results

Create a platform where students can view and compare their results.

## 2 AI Teachers

Ask AI teachers questions about the questions the student got wrong.

## 3 Study Plan

Create a personalized study plan, taking into account your difficulties.

APP

## Learning Platform

3rd Grade - High School

⚙️ OpenAI Configuration (Required for AI Professor)

🤖 OpenAI: Configured via Streamlit Secrets - AI Professor Active!

### 🔍 Student Identification

Enter your student ID below to access your personalized platform

Ex: 123456789

## Welcome to Learning Platform

Enter your student ID above to access your personalized dashboard

## Login Area

Here, the student will log in using their RA number (student registration number in portuguese) to access the system.

APP

The screenshot shows a student dashboard with the following sections:

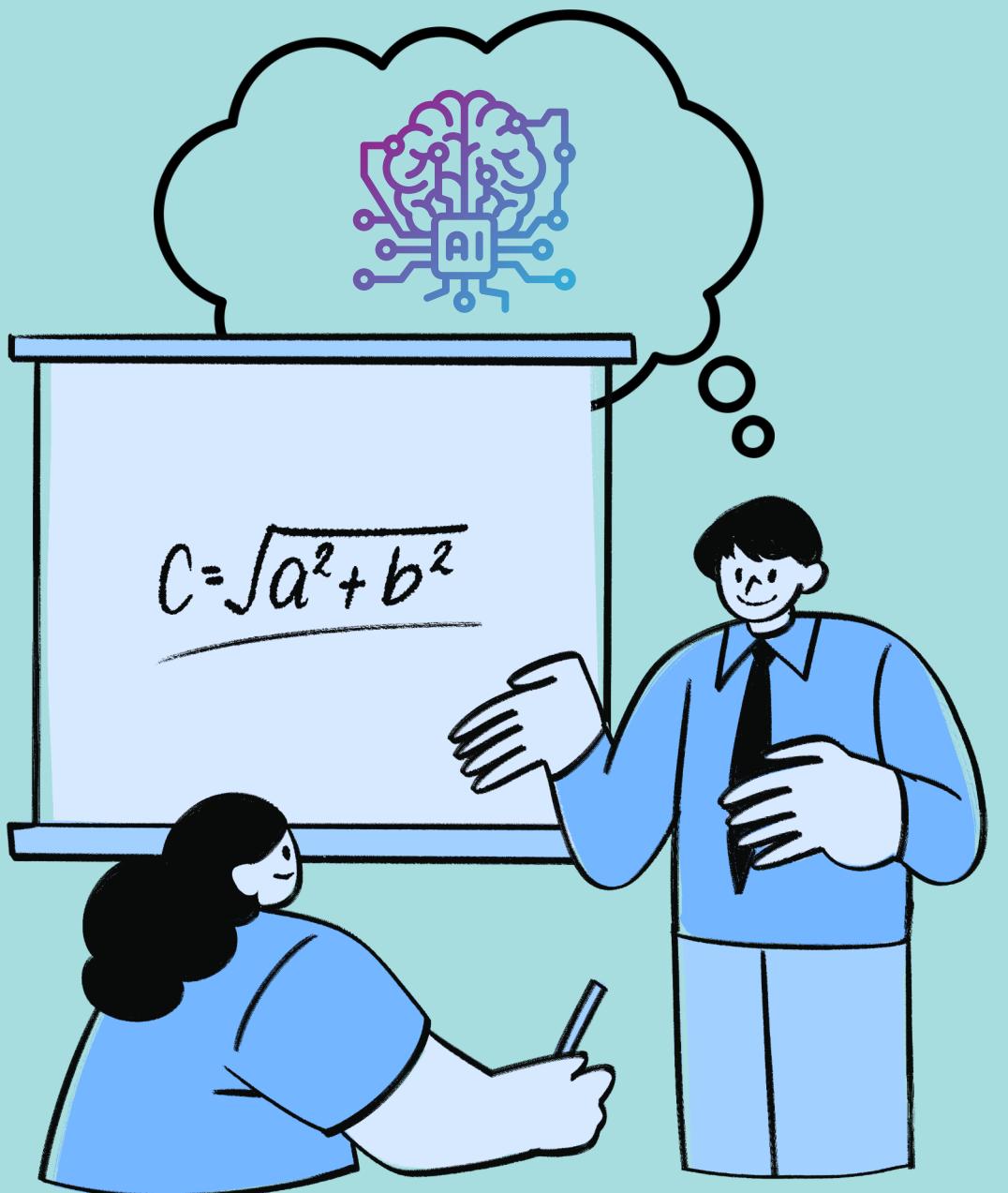
- Welcome:** Hello, ADRIANA D... Good to see you here!
- Your current performance:** Portuguese: 14/18 | Mathematics: 17/18
- Explore tabs:** AI Professor and Tutor LU!
- Dashboard tabs:** Dashboard (selected), Questions + Professor FABI, LU - Learning Unit, Study Plan.
- Your Progression:** Level 1, Points 90, Achievements 4, Actions 0.
- Your Achievements:** Portuguese Aspirant (12+ correct in Portuguese), Mathematics Master (15+ correct in Mathematics), In Progress (Reviewing questions to improve), Perfect Balance (Good performance in both subjects).
- Performance by Subject:** Interactive gauges for Portuguese (14/18) and Mathematics (17/18).
  - Portuguese gauge: 14 (blue arrow), 5 (red arrow).
  - Mathematics gauge: 17 (blue arrow), 8 (red arrow).
- Contents that Need More Attention:** A bar chart showing errors across various topics in Portuguese and Mathematics.

## Login Area

Here, the student will log in using their RA number (student registration number in portuguese) to access the system.



APP



# AI Teacher

## Professor FABI

Specialized in answering questions about the questions the student got wrong.

## LU - Learning Unit

General teaching unit, you can ask any questions about any subject!

APP

## A Professor FABI

**Questions + Professor FABI**  
Review the questions you got wrong and chat with AI Professor about each one

Portuguese Mathematics

**Questions to Review - Portuguese**

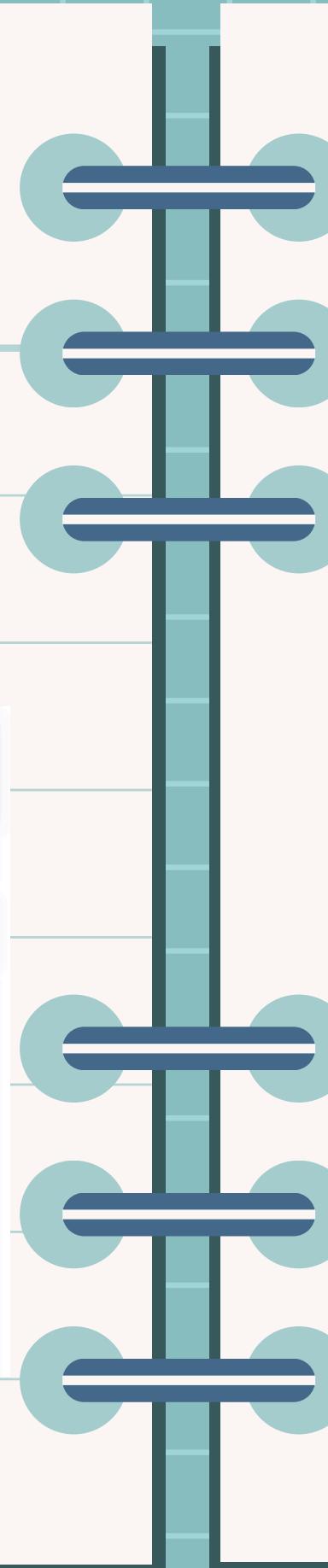
✗ Question 3 - Tese

**Question 3 - Tese**  
Descriptor: Identificar a tese de um texto.  
Recommended Lesson: [Click here](#)  
Question Link: [Click here](#)

**Professor FABI - Question 3**  
Tese | Portuguese

Ask a question about this question  
Ex: How to solve step by step? Why was my answer wrong? Explain the concept of Tese

Ask





APP

3

## Personalized Study Plan

Dashboard

Questions + Professor FABI

LU - Learning Unit

Study Plan

✨ Hello, ADRIANA D...SA!

A personalized study plan can increase your efficiency by **up to 40%**!

### 🎯 Benefits:

- Focus on your real needs
- Achievable and adapted goals
- Strategies for your style
- Progress checkpoints
- +25 gamification points!

### 📊 Your Current Performance

Portuguese

14/18

Mathematics

17/18

Errors

5

Contents

5



Ready?

5 minutes!

Create Plan!



APP

3

## Personalized Study Plan

**Your Availability**

Hours/week for studying:

Study days:  Mon  Wed  Fri

Best time:

Duration:

**Continue ➔**

**Your Goals**

Preparation time:

Priority subjects:  Portuguese  Mathematics

Score goal:

Specific objective: Ex: Pass in Medicine...

**Continue ➔**

**Your Learning Style**

How do you learn best:

- Videos
- Reading
- Exercises
- Groups
- Mind maps

Concentration difficulty (1-10):

Test anxiety:

**Very anxious**

**Your Difficulties**

Portuguese difficulties:

Mathematics difficulties:

Other difficulties:

**Motivation and Preferences**

Motivation level (1-10):

What motivates you:

Preferred resources:

**Back** **Generate Plan!**

By simply answering a few questions about their routine and difficulties, students will have access to a personalized study plan to help them achieve their goals.



APP

### 3 Personalized Study Plan

Dashboard Questions + Professor FABI LU - Learning Unit Study Plan

#### Your Personalized Study Plan

##### Weekly Hour Distribution

Subject	Hours
Portuguese	4h
Mathematics	4h
Writing	2h
Review	3h
Mock tests	2h
Total	15h

##### Immediate Focus (Next 2 Weeks)

**Portuguese**

- Text interpretation
- Figures of speech
- Commas and punctuation

**Mathematics**

- 1st and 2nd degree functions
- Arithmetic progressions
- Plane geometry

##### Plan Goals

**Short Term (1 month)**

- Review 3 Portuguese contents
- Review 3 Mathematics contents

**Medium Term (3 months)**

- Increase 6 correct in Portuguese
- Increase 6 correct in Mathematics

**Long Term (6 months)**

- Reach 800+ points
- Master main contents

#### Suggested Weekly Schedule

##### Monday - 3h

Focus: Portuguese

Activities: Theory (1h) → Exercises (1h) → Review (1h)

##### Wednesday - 3h

Focus: Mathematics

Activities: Theory (1h) → Exercises (1h) → Review (1h)

##### Friday - 3h

Focus: Mixed

Activities: Theory (1h) → Exercises (1h) → Review (1h)

#### Study Strategies

Watch video lessons about contents with difficulty

Use mind maps to organize knowledge

Solve exercises similar to those you got wrong

Practice with weekly mock tests

#### Recommended Resources

\*\*YouTube:\*\* Professor Ferreto (Mathematics), Professor Noslen (Portuguese)

\*\*Booklets:\*\* Poliedro, Bernoulli, Etapa

\*\*Mock tests:\*\* Previous ENEM exams

\*\*Platform:\*\* Use AI Professor for specific doubts

#### Progress Checkpoints

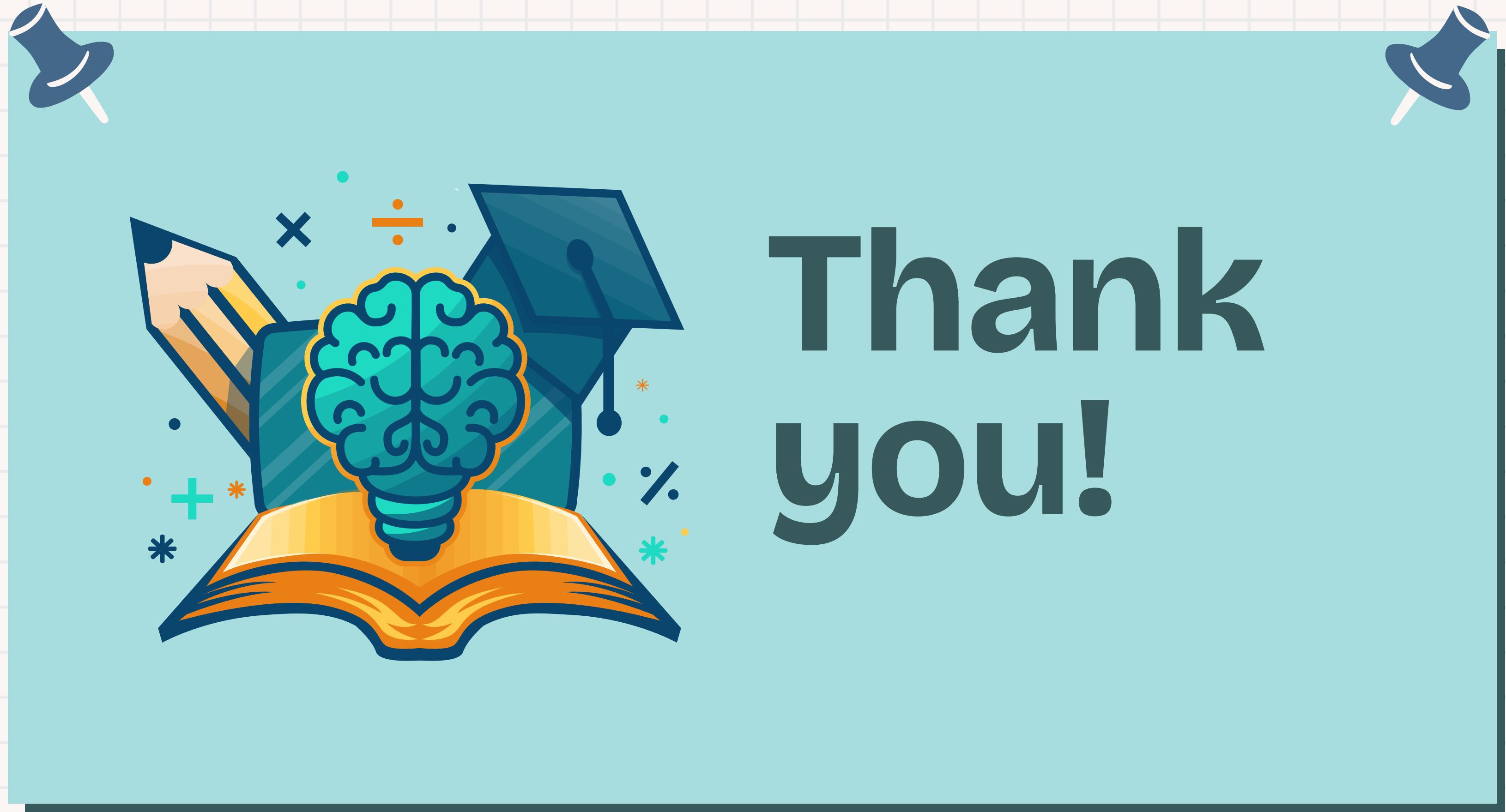
Week 4	Review progress and adjust plan
Week 8	Review progress and adjust plan
Week 12	Review progress and adjust plan
Week 16	Review progress and adjust plan
Week 24	Review progress and adjust plan



Update Plan

Save (PDF)

View Dashboard



Thank  
you!