

F.4 - Mathematics M2

Date: 21/11/2022

T: Good morning principal, teachers and our fellow schoolmates. I am Rambo Lau from 4C. I am Craig Yeung also from 4C. We are students from M2.

R: Have you ever heard about earning money by gambling?

C: Yeah, there is a professor from the department of statistics in the Chinese University using the Algorithm for betting on horse racing. He successfully won over fifty million dollars from the Jockey Club in a short period of time.

R: Oh, you knew that too? The professor used Algorithm to win money, but he was accused of disclosing business secret and got into trouble.

C: So, how is this related to M2?

R: They are closely related. To create this Algorithm, he has to learn an idea called Regression, using thousands of racing data, including weather information, performances of riders, how frequent a horse race is, to obtain a formula to calculate how likely a horse will win.

C: Oh ! I see, are we going to use what we are learning called Matrix to handle such numerous amount of data? Matrix is a special way to represent numbers so that we can handle them in a very compact manner. Also, Matrix can also be used in many aspects such as describing flow of population amount in different cities.

R: Yes. We do have to use the idea of Matrix to understand the Algorithm. We also need to do many manipulations of Matrices. Sometimes we have to do calculus as well.

C: Oh, Calculus we haven't learnt that! It seems that we still have to struggle in M2 before earning a lot with the Algorithm.

R: Just let it go. It is of zero likelihood for us to become a millionaire by gambling with this sophisticated Algorithm. Let's study hard and earn money by working and saving!

T: That's all for our sharing. Thank you very much.