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- **Solve the exam on your own.** You must complete the exam questions independently. Cheating, in any form, is **strictly prohibited** and can have serious consequences.
- **Late submissions will not be accepted.** Please do not email us your late submissions. You are expected to submit your solutions only through Ninova before the due date.
- Write out the solutions to each question on an A4 paper using an **unerasable pen**. Use at least one page per question and use only one side of the paper, and remember to include your name, ID, and signature on each paper. Merge the images of each paper in a pdf file with the correct rotation.
- **Show your work.** To get a good grade, make sure to include all the necessary steps in your solution. Displaying the intermediate steps instead of going directly to the conclusion is important.
- The final exam contributes **40%** to your overall grade.

Question 2 [20 pts]

A car company exclusively manufactures electric and hybrid car models. Among those produced, 5% of the electric and 25% of the hybrid cars weigh over 1500 kg. Additionally, 30% of the cars in production are electric.

- a) What is the probability of randomly selecting a car from production that weighs under 1500 kg?
- b) If a car is selected at random and found to weigh under 1500 kg, what is the likelihood that it is a hybrid car?