## Computer Vision

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Lesson 1
Exercises

You may respond in English or French, whichever is more comfortable. The best answers are concise and direct. You may work individually or as a group.

1) What is an ROC curve and how is it used?
2) What does it mean for an ROC curve to pass below the line from $(0,0)$ to $(1,1)$ ? Use the mathematics to explain your answer.
3) You are given a classifier with an ROC curve for that passes the point $(F N R=0.01, F P R=0.1)$. Is it possible to determine the Probability of Error for the classifier at this point? If yes, give the formula. If no, explain why.
