

Information and Uncertainty

Quiz 1

SPRING 2021

You have 20 minutes from the time when the quiz is announced in LMS and/or Gradescope, including downloading and printing. Download and print the quiz. I provided a space below each question for your answers. We will not grade any answers uploaded after 20 minutes from the start of the quiz.

1. Write down three axioms of von Neumann and Morgenstern (vNM) expected utility, and state the representation theorem of vNM. (No proof necessary.)

2. Write down the definitions.

- (a) Certainty equivalent
- (b) Arrow Pratt measure

3. Write down three key conditions of the lemon's market of Akerlof where the value of the used car can have one of two values.