IE5203 Decision Analysis
Assignment #2
Due: Tuesday, 14 Oct 2025, 7 pm

You must show your workings and the equations to be solved or computed
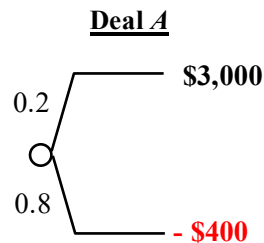before using any equation solver.
Submit your solutions at the Dropbox outside the ISEM Department Office at
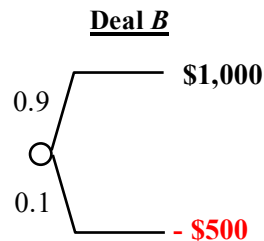E1A-06-25 or to the professor at the end of lectures.

Question (Total 50 marks)

Anna's current wealth is $2,000 in cash, and she has the following wealth utility function:

$$u(w) = \begin{cases} \frac{w^2}{100,000} & w \geq 0 \\ \frac{-w^2}{100,000} & w < 0 \end{cases} \quad \text{where is in dollars.}$$

1. What is Anna's current risk tolerance in dollars? (10 marks)

2. What is Anna's current risk attitude? (5 marks)

3. What is Anna's current personal indifferent buying price for risky Deal *A* below? (10 marks)

Deal *A*

4. Anna purchased Deal A for $800. Her wealth now comprises $1,200 and Deal *A*. What is now Anna's risk tolerance in dollars? (5 marks)

5. What is now Anna's personal indifferent buying price for Deal *B* below? (10 marks)

Deal *B*

6. Anna purchased risky Deal *B* for $500. Anna's wealth now comprises $700, Deal *A* and Deal *B*. What is now Anna's personal indifferent selling price for Deal *A* alone? (10 marks)