**EC404: Behavioral Economics Handout**

Principles of Choice under Uncertainty

For each of the following problems, circle the true or correct answer(s). It may be that none are true.

**Problem 1:**

Augie, who is a risk averse person, faces a choice of flipping a (fair) coin or not. If they flip the coin, they earn $50 on heads and -$10 on tails. If they do not, they are given $x dollars.

A: Augie will choose to flip the coin for all values of x.

B: Augie will choose to flip the coin for all values of x less than 20.

C: Augie will choose to flip the coin for all values of x less than 0.

**Problem 2:**

Sarah forgot the definition of risk averse. The one we will use in this class is:

A: A person is risk averse if they dislike all large risks.

B: A person is risk averse if they prefer certainty versus taking risks.

C: A person is risk averse if they prefer with certainty the expected value of a lottery versus playing out that lottery.

D: A risk-averse person prefers $0 to flipping a coin where you win $5 on heads but lose $5 on tails.

**Problem 3:**

Heiko also doesn’t remember anything about the first class. He thinks that expected values and expected utilities are important though. The expected utility of a lottery with two outcomes (z and h) and associated probabilities .4 and .6, is given by:

A: .4 u(z) + .6 u(h)

B: .4 ln(z) + .6 ln(h)

C: .4 u(z+w) + .6u(z+w)

D: .4 z + .6 h

**Problem 4:**

You are wondering if this class is right for you. You thought there would be interesting psychology and nifty discussions, but so far all you’ve seen is boring math. There is no question here.

A: [Stare blankly out the window, leaving no answers circled. Joy is the Great Outdoors.]

B: Life is nothingness and meaning is arbitrary. There is no pleasure, no happiness.

C: I’m living my best life and abstract mathematics gives me a joy that, for instance, the deep satisfaction of knowing the touch of another human could never possibly match.

D: 