**Study Questions: Part 3**

1.            An increase in the interest rate cannot make a lender who satisfies WARP become a borrower.

2.            If the interest rate at which you can borrow is higher than the interest rate at which you can lend, your budget for current and future consumption is a convex set.

3.            Harvey Habit has a utility function *U*(*c*1, *c*2) = min{*c*1, *c*2}. If he had an income of $880 in period 1 and $1,320 in period 2 and if the interest rate were 0.20, how much would Harvey choose to spend on bread in period 1?

                a.            $1,620

                b.            $360

                c.            $540

                d.            $2,160

                e.            $1,080

4.            Holly’s utility function is *U*(*c*1, *c*2) = *c*1/21 + 0.87*c*1/22, where *c*1 is her consumption in period 1 and *c*2 is her consumption in period 2. In period 2, her income is twice as large as her income in period 1. At what interest rate will she choose to consume the same amount in period 2 as in period 1? (Choose the closest answer.)

                a.            0.30

                b.            0.08

                c.            0.23

                d.            0

                e.            0.15

5.            Of any two gambles, no matter what their expected returns, a risk averter will choose the one with the smaller variance.

6.            If Paul is risk loving and his basketball team has a probability of .5 of winning, then Paul would rather bet $10 on his team than $100. (When Paul bets *X*, he wins *X* if his team wins and loses *X* if his team loses.)

7.            Socrates owns just one ship. The ship is worth $200 million dollars. If the ship sinks, Socrates loses $200 million. The probability that it will sink is .02. Socrates’ total wealth, including the value of the ship is $225 million. He is an expected utility maximizer with von Neuman-Morgenstern utility *U*(*W*) equal to the square root of *W*. What is the maximum amount that Socrates would be willing to pay in order to be fully insured against the risk of losing his ship?

                a.            $4 million

                b.            $2 million

                c.            $3.84 million

                d.            $4.82 million

                e.            $5.96 million

1. True

2. False

3. e

4. e

5. False

6. False

7. e