1. Choosing between two options (all of one and none of the other)
   • Compare utility levels
     o Use Expected Utility and Utility as appropriate
   • See Practice Midterm 2 #4

2. Diversification with a known allocation
   • Compare utility levels
     o Use Expected Utility and Utility as appropriate
   • See Extra Problem Set 6 #4b

3. Diversification with an unknown allocation
   • Maximize utility like a typical Cobb-Douglas problem
     o Use Expected Utility
     o Use traditional budget constraint
     o Shows you the quantities demanded when they diversify
   • Make sure to watch for concave functions
     o In this case the consumer would not want to diversify
     o You would need to test expected utility if they chose all good 1 and if they chose all good 2 to see which is higher
   • See Extra Problem Set 6 #2

4. Risk Loving/Neutrality/Aversion
   • If we know whether a consumer is a risk lover, risk neutral or risk averse we can make some statements about decisions they will make
     o Risk Lover:
       1. Will always take the gamble if the expected value is greater than or equal to the expected value of the guaranteed payment
       2. We cannot say what they will do if the expected value of the gamble is less than the expected value of the guaranteed payment (we do not know how much of a risk lover they are)
     o Risk Neutral:
       1. Will always choose whichever option brings the higher expected value
     o Risk Averse:
       1. Will always take the guaranteed payment if the expected value is greater than or equal to the expected value of the gamble
       2. We cannot say what they will do if the expected value of the guaranteed payment is less than the expected value of the gamble (we do not know how risk averse they are)
   • See Extra Problem Set 6 #15

5. Insurance
   • Steps to solve insurance problems
     1. Find expected utility level without insurance
     2. Write expected utility function with insurance
     3. Set step 2 equal to step 1 and solve for z
   • See Extra Problem Set 6 #16