

Law & Economics Sample Problems

Contracts:

Optimal Reliance formula:

*if (probability of promisor's performing) x increase in the value of performance caused by additional reliance) > (probability of promisor's breach) x (increase in cost of breach caused by additional reliance) => efficient to rely

Example:

Suppose Susie's uncle promises her a cruise if she graduates with a GPA > 3.5. The cost of the cruise is \$2,000. In anticipation of the cruise, Susie buys a swimsuit, sunscreen, books, etc. for a total cost of \$200. Susie believes that there is an 80% chance that she will graduate with a GPA > 3.5. Was Susie's reliance optimal?

$$0.8 \times \$2,000 = \$1,600 > 0.2 \times \$200 = \$40$$

Yes, Susie's reliance was optimal.

Another example:

Suppose I am selling a bike to a buyer who wants this bike to enter a race. The prize for winning the race is \$5,000. The buyer will spend \$3,000 in reliance expenses on hotel costs, transportation, and racing gear. Under what circumstances would this reliance be optimal?

X = probability of promisor's performing

$$X \times \$5,000 > (1-X) \times \$3,000$$

$$5,000X > 3,000 - 3,000X$$

$$8,000X > 3,000$$

$$X > 3/8$$

Sample problem to calculate damages:

Kayla is training to be a professional golfer. She needs an excellent set of golf clubs, which cost \$2,000. Further, she needs lessons from a golf pro. The pro, Jeff, lives in another state. It will cost Kayla \$5,000 in travel expenses to take golf lessons. Jeff charges \$50,000 for lessons. Tyler is a golf pro who also works at the same course as Jeff. Tyler charges \$60,000 for lessons. Jeff and Tyler are equally skilled in giving golf lessons. (Tyler charges more because he had more years of experience.)

Kayla buys the clubs and spends the money to travel to Jeff. Kayla realizes that there is a 20 percent chance that Jeff will breach their contract, so Kayla doesn't pay Jeff until she arrives for the lessons. Upon arrival, Jeff tells Kayla that he can't teach her but that Tyler is available for lessons.

1. If Kayla sues Jeff for reliance damages, how much money would this be?

Kayla decides to hire Tyler and to sue Jeff.

2. If Kayla sues Jeff for expectation damages, how much money would this be?

Both Jeff and Tyler claim that after Kayla takes lessons from either one of them, she has a 10 percent chance to win a \$1,000,000 prize from a golf tournament. Therefore, her expected winnings are \$100,000. As it turns out, Janel, a wealthy doctor, arrived the day before Kayla and offered Jeff \$80,000 for golf lessons.

3. Was Kayla's reliance optimal?

4. Was Jeff's breach optimal?