EE 403

Exercise: Economics of Tort Law

(Due date: Friday 16th of September before 11:00am)

(Turn in your exercise at BE-office)

Question 1. Bicyclists who ride at night can reduce the risk of getting hit by a car by wearing reflective vests. Drivers can reduce the risk of hitting a bicyclist by installing special headlights, which are brighter than normal headlights. The likelihood of an accident is as follows:

		Injurer Precaution	
		Normal Headlights	Special Headlights
Victim precaution	No Vest	8%	3%
	Vest	5%	1%

The damage done by an accident is $1,000, and compensation is perfect. Reflective vests cost $15, and special headlight cost $30.

a) What is the **efficient level of precaution** by both sides? (Hint: lowest social cost of accident)
b) What levels of precaution by both parties will a rule of **no liability** lead to?
c) What levels of precaution will a rule of **strict liability** lead to?
d) What levels of precaution would a rule of **simple negligence** lead to?
e) What levels of precaution would a rule of **strict liability with a defense of contributory negligence** lead to?
f) Who bears the **residual risk of accidents** under simple negligence? What about under strict liability with a defense of contributory negligence?
g) What can you say about the levels of **driver and bicyclist activity** under these two rules?

Question 2. The case of *New York Cent. R. Co. v. Thompson* (21 N.E.2d 625, 1939) con- cerned a woman who accidentally caught her foot in some railroad tracks and was injured when a train failed to brake in time and struck her. Suppose the liability rule is negligence with a defense of contributory negligence.

a) Will the woman be able to recover her damages if the court determines that she was negligent for walking on the tracks?
b) Under what doctrine will the woman be able to recover, despite her neg- ligence, if the court determines that the train saw her predicament and had time to brake but did not? Explain the economic rationale for this doctrine.

Question 3. At a specific restaurant there is a 1% chance of food poisoning that would cause $1,000 in damage to the victim. There are three potential customers, who have values of $10, $15, and $20 for a meal at this restaurant. Suppose the rule is strict liability, and the market is competitive. Suppose initially there is no liability rule if someone gets sick, and the menu cost of the meal is $8.

a) What is the efficient activity level (how many people should be eating at this restaurant)?
b) How many people will choose to eat here if they are fully aware of the risk? If they are not aware of the risk?

Question 4. Suppose that the sunken barge in *United States v. Carroll Towing Co.* and its cargo are worth $100,000. Assume that the probability that the barge would break loose if the bargee is not present equals 0.001. If the bargee is present, then the probability of the barge's breaking loose is reduced by half, to 0.0005. Paying the bargee to stay on the barge will cost the barge owner $25. If the barge owner does not incur this $25 expense, is his behavior negligent under the Hand rule?