

15.040, Spring 2004
Summary of Online Game 7
Courtesy of Mike Shor, Vanderbilt University

Game 7: A mechanism design (principal agent) problem

In this timed game, you are the owner of a large pharmaceutical company looking to subcontract out a number of research projects, each with uncertain outcome, to outside R&D facilities. Each research facility, once hired, can choose either to put in routine effort (assign a normal staff to the project) or high effort (assigning its best researchers). Its choice will affect how likely the project is to succeed and earn a profit. You cannot monitor a facility's effort directly; all that you know is whether or not its project succeeds. You must offer all research facilities the same offer consisting of a base salary and bonus if the project is a success. What salary and bonus do you wish to offer?