

Solution to Homework 12

Question. Suppose that a traffic judge fines a driver \$200 for not stopping at a stop sign, but if he knows that a person's annual salary is higher than 100K, he raises this fine to \$2000. In this situation, for a highly paid person who was caught not stopping – and whose salary is supposed to be confidential, what is the cost of revealing the first of 6 digits of his salary? What is the cost of revealing the last of these 6 digits?

Answer. The cost of revealing the first of 6 digits is $\$2000 - \$200 = \$1800$. There is no cost associated to revealing the last of the 6 digits: this disclosure does not change the fine.