

CS 530
Assignment 3
Due: September 22

Try solving this problem by Wednesday so that any problems with Bayesian classification will be apparent.

We want to classify bolts of fabric as cotton or polyester, but can only sample the color. Let C_1 be cotton and C_2 as polyester. $1/3$ of bolts are cotton. The colors are yellow, white and

	Class	Red	White	Yellow
red with the conditional probabilities:	C_1	$3/5$	$1/5$	$1/5$
	C_2	$2/5$	$1/5$	$2/5$

Construct the Bayes classifier for this problem.