(8 points; 8 minutes)

2. The popularity of TV shows is important to advertisers. A random sample of 1500 TV viewers in California was studied with the results shown below. Use these results to decide whether the popularity of the selected TV shows is the same in CA and NY or different.

(Use a Type I error rate of 0.01 to make your decision.)

Popularity of Selected TV Shows		
	Monday 6 p.m. Audience	
		Viewers in
Show	Share in NY	CA sample
Lost	31%	426
American Idol	26%	414
Boston Legal	19%	333
Friends	24%	327

(8 points; 8 minutes)

3. The popularity of TV shows is important to advertisers. A random sample of 1600 TV viewers in California was studied with the results shown below. Use these results to decide whetherthe selected TV shows are equally popular.

(Use a Type I error rate of 0.01 to make your decision.)

Popularity of Selected TV Shows Monday 6 p.m. Audience		
Show	CA sample	
Lost	416	
American Idol	414	
Boston Legal	383	
Friends	387	