

15.28 Can people really identify their favorite brand of cola? Volunteers tasted Coca-Cola Classic, Pepsi, Diet Coke, and Diet Pepsi, with the results shown below. *Research question:* At $\alpha = .05$, is the correctness of the prediction different for the two types of cola drinkers? Could *you* identify your favorite brand in this kind of test? Since it is a 2×2 table, try also a two-tailed two-sample Z test for $\pi_1 = \pi_2$ and verify that Z^2 is the same as your chi-square statistic. Which test do you prefer? Why?

<i>Correct?</i>	<i>Regular Cola</i>	<i>Diet Cola</i>	<i>Row Total</i>
<i>Yes, got it right</i>	7	7	14
<i>No, got it wrong</i>	12	20	32
<i>Col Total</i>	19	27	46