Name:_____   Math 130
Date: 4/29/2025   Quiz 16

A formula you may need:

$$z = \frac{\hat{p}_1 - \hat{p}_2 - (p_1 - p_2)}{\sqrt{\hat{p}\hat{q}}\sqrt{\dfrac{1}{n_1} + \dfrac{1}{n_2}}}$$

1. (10 points) It has been claimed that stats classes at PCC have a higher retention rate than stats classes at Rio Hondo (a retention rate is the percentage of students who register for a class and stick it out until the end of the class without dropping). In the Fall of 2012 this claim was tested by taking a sample of 175 students at PCC and 120 students at Rio Hondo who were registered in an Intro to Statistics course on the first day of classes. Of the 175 PCC students sampled, 151 students remained in the class until the end of the semester. Of the 120 Rio Hondo students sampled, 99 students remained in the class until the end of the semester. Test the claim at the 0.07 significance level. Use the p-value method.