

MATH-111 (DUPRÉ) 10 NOVEMBER 2008 QUIZ IN LECTURE ANSWERS

1. PRINT LAST NAME IN LARGE CAPITALS IN UPPER RIGHT HAND CORNER OF THIS SHEET

2. PRINT FIRST NAME IN CAPITALS UNDERNEATH LAST NAME

3. CIRCLE LAB DAY _____T_____TH

4. CIRCLE LECTURE HOUR _____11AM_____1PM

ANSWERS MUST BE CORRECT TO THREE SIGNIFICANT DIGITS

5. Suppose that we ask 100 ducks in Duckburg if they support Goofy for mayor and 56 say yes. What is the p-value (that is, the significance) of this data as evidence that Goofy will win the election?

1-prop z -test: $p_0 = .5$, $p > p_0$, p -value= .1150697316.

6. Suppose that fish weight is normally distributed with mean, μ , unknown and standard deviation, $\sigma = 10$. Suppose we have a sample of size $n = 30$ with sample mean $\bar{x} = 43$. Give the p-value of this data as evidence that the true population mean exceeds 40, that is to say give the significance of this data as evidence that $\mu > 40$.

z -test: $\mu_0 = 40$, $\sigma = 10$, $\bar{x} = 43$, p -value= .0501741081.

7. If the p-value of our data is .0357 and we are working a hypothesis test at level of significance $\alpha = .05$, what should we say about the null hypothesis?

It should be rejected

8. If we are working a hypothesis test at level of significance $\alpha = .05$ and the p-value of our data is .798, then what should be the result of the hypothesis test?

The data is inconclusive or the test result is inconclusive.