

B. Use this p-value to accept or reject the null hypothesis. Does your answer agree with the page 86 answer?

C. What does this p-value indicate is the strength or validity of the decision made concerning the null hypothesis?

III. Past experience indicates that the population mean weight of material containers used to make computer parts is 5,000 kilograms. The standard deviation is 28 kilograms. Type I error for a sample of 49 will be controlled to the .01 level of significance. The 99% confidence interval is 4,989.68 kilograms to 5,010.32 kilograms.

A. Calculate the type II error for a two-tail problem using each of these possible population means.

$$\mu = 4,985 \text{ kg}$$

$$\mu = 4,995 \text{ kg}$$

$$\mu = 5,000 \text{ kg}$$

$$\mu = 5,005 \text{ kg}$$

$$\mu = 5,015 \text{ kg}$$

B. Using the data calculated in problem A, sketch and label an operating characteristic curve.

C. Using the data calculated in problem A, sketch and label a power curve.



**Note:** An operating characteristic curve and power curve for a one-tail problem is limited to one side of the population mean. Both look like half a normal curve stopping at the mean.