Examples 10.3 and 10.5

Read example 10.3 which begins on page 452 of your text and example 10.5 which begins on page 464.

Print GOLFCRD.pdf and use it to complete the following section. In the MINITAB output, Brand A is coded as 1, Brand B as 2, Brand C as 3 and Brand D as 4.

According to the MINITAB output, $s_p = \underline{\underline{\text{ }}}$, the mean distance for brand C golf balls is $\underline{\underline{\text{ }}}$, and SST = $\underline{\underline{\text{ }}}$.

$" = .10 \quad \text{RR: } \underline{\underline{\text{ }}}$

Since $F = \underline{\underline{\text{ }}}$ with p-value = $\underline{\underline{\text{ }}}$, there ______
sufficient evidence to indicate that the mean distances traveled differ for at least two of the four brands of golf balls.

If we conclude that the mean distances traveled differ for at least two of the brands of golf balls, we will use Bonferroni confidence interval to determine which pairs of mean distance differ.

Since there are 4 brands of golf balls there will be ______ pairs of means to compare.

Let $c = \text{the number of pairs of means to compare, where } c = \frac{p(p-1)}{2}$.

The formula for a Bonferroni Confidence Interval is

$\bar{x}_i \& \bar{x}_j \pm t_{\alpha} \sqrt{\frac{MSE}{n_i \% \frac{1}{n_j}}}, \quad df' n\&p$

If "$ = .10$, then we need $t_{\alpha}$. Most t-tables do not provide this value.
In order to have MINITAB do Bonferroni confidence intervals for us we use the subcommand Fisher k1, where $k1 = \frac{\alpha}{c} =$ ______________.

3) Give the confidence interval for each of the pairs of means
Remember, if the interval does not contain 0, we can conclude that the two population means differ. For each pair of means that differ, enter the name of the mean which is larger in the space at the end of the interval. If the means do not differ leave the space blank.

_______________ < $\mu_A - \mu_B$ < ________________  _________________

_______________ < $\mu_A - \mu_C$ < ________________  _________________

_______________ < $\mu_A - \mu_D$ < ________________  _________________

_______________ < $\mu_B - \mu_C$ < ________________  _________________

_______________ < $\mu_B - \mu_D$ < ________________  _________________

_______________ < $\mu_C - \mu_D$ < ________________  _________________