Answers: *Choosing the correct inference procedure*

1. Two-sample t interval for $\mu_1 - \mu_2$
2. One-sample t interval/test for μ
3. One-sample z interval for p
4. t interval/test for the slope of a least-squares regression line
5. Chi-square test for association/independence
6. If the sample includes iPod and non-iPod owners, use a two-sample z interval for $p_1 - p_2$. If the sample includes only iPod owners, use a one-sample z interval for p.
7. One-sample t interval for μ
8. Chi-square test for goodness-of-fit
9. If the response variable is quantitative (e.g. whisker length), then a one-sample t interval for μ (paired data) is appropriate. If the response variable is categorical (which is smoother, side A or side B?), then a one-sample z interval for p is appropriate.
10. Two-sample z interval for $p_1 - p_2$