SELF-TEST

- 1. Properties of the sampling distribution of the mean differences:
 - **a.** Its mean is equal to $\vec{0}$.
 - **b.** The larger the sample sizes, the more closely the distribution approximates the normal curve.
 - c. The larger the sample sizes, the smaller the standard error of the mean differences.
- 2. A *t* test for independent samples is used when data are gathered from unrelated (independent) groups, such as when a control group is compared to a separate experimental group.
- **3.** A *t* test for dependent samples is used when data are gathered from the same, related, or matched samples on two occasions (repeated measures), such as when participants are pretested, receive a treatment, and then are posttested.
- 4. e (a and b are correct)
- 5. t(22) = 0.79, p > .05. Leadership style did not significantly influence worker productivity.
- 6. t(9) = -3.79, p < .01. The course significantly improved reading speed.