

SELF-TEST

1. b
2. b
3. c
4. Its mean is equal to μ . The larger the sample sizes, the more nearly the distribution approximates the normal curve; the larger the sample sizes, the smaller the standard error of the mean.
5.
 - a. $t(216) = 1.38, p > .05$. The program has not improved reading significantly.
 - b. 95% CI = $28.2 \pm 1.15 = 27.05$ to 29.35
6.
 - a. $t(12) = -4.50, p < .01$. Couples experiencing marital difficulty engaged in significantly fewer nods.
 - b. 99% CI = $22.6 \pm 6.44 = 16.16$ to 29.04
7.
 - a. $\bar{X} = 58.42$
 - b. $s^2 = 173.36$
 - c. $s = 13.17$
 - d. $s_{\bar{X}} = 3.80$
 - e. 95% CI = $58.42 \pm 8.36 = 50.06$ to 66.78
 - f. $t(11) = 2.43, p < .05$. Students seeking counseling exhibit more hypochondriasis than would be expected from test norms.