

## Chapter 3 Selected Answers to Mastery Items

1. These are ranks supplied by judges; thus, they are ordinal.
2.  $\Sigma X = 14$ ;  $(\Sigma X)^2 = 196$ ;  $\Sigma X^2 = 54$ .
3.  $\Sigma X = 74$ ;  $(\Sigma X)^2 = 5,476$ ;  $\Sigma X^2 = 658$ .
4. Major, month of birth, ethnicity, state of residence.
6. Positively skewed: Pull-ups, skinfolds. Negatively skewed: written driver's examination scores, any beginning skills test (following instructions).
12.  $50.00 - 41.15 = 8.85$
13.  $z$  score =  $(68 - 50)/10 = 18/10 = 1.8$ . Thus,  $50.00 + 46.41 = 96.41$ .
14.  $z$  score =  $(47.5 - 50)/10 = -2.5/10 = -.25$ . Thus,  $50.00 - 9.87 = 40.13$ .