

## Attendance Quiz 14

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. Use the given confidence level and sample data to find (a). the margin of error and (b). the confidence interval (c). the critical value  $t_{\frac{\alpha}{2}}$  for the population mean  $\mu$ . Assume that the population has a normal distribution.

(a) Math SAT scores for women: 95% confidence;  $n = 15$ ,  $\bar{x} = 496$ ,  $s = 108$

(b) Elbow to fingertip length of men: 99% confidence;  $n = 32$ ,  $\bar{x} = 14.50in$ ,  $s = 0.70in$