## **Exercise C-4**

From the data,  $\overline{X} = 6.38$  and  $s^2 = 2.16$ . Since n = 10, the DF for the *t* distribution is 9. Since we want a 95% confidence interval,  $\alpha = 0.05$  so  $1 - \alpha/2 = 0.975$ . Thus, the critical point is  $t_{9, 1-\alpha/2} = 2.262$ , so a 95% confidence interval for  $\mu$  is  $6.38 \pm 2.262\sqrt{2.16/10} = 6.38 \pm 1.05$ , or [5.33, 7.43].