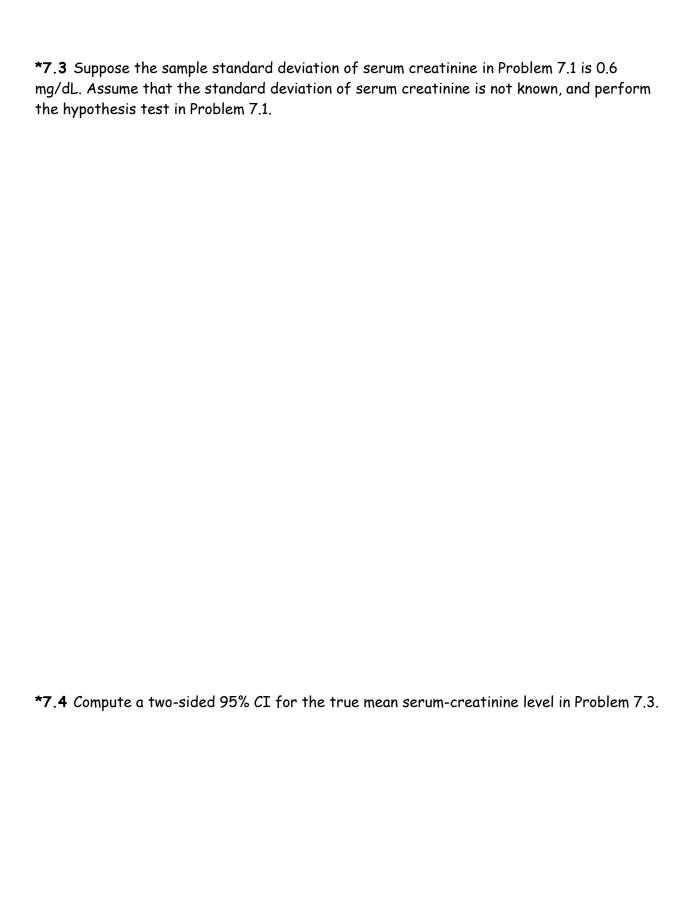
Renal Disease

The mean serum-creatinine level measured in 12 patients 24 hours after they received a newly proposed antibiotic was 1.2 mg/dL.

*7.1 If the mean and standard deviation of serum creatinine in the general population are 1.0 and 0.4 mg/dL, respectively, then, using a significance level of .05, test whether the mean serum-creatinine level in this group is different from that of the general population.

*7.2 Compute a two-sided 95% CI for the true mean serum-creatinine level in Problem 7.1



Ophthalmology

The drug diflunisal is used to treat mild to moderate pain due to osteoarthritis (OA) and rheumatoid arthritis (RA). The ocular effects of diflunisal had not been considered until a study was conducted on its effect on intraocular pressure in glaucoma patients who were already receiving maximum therapy for glaucoma [5].

*8.19 Suppose the change (mean +/- sd) in intraocular pressure after administration of diflunisal (follow-up - baseline) among 10 patients whose standard therapy was methazolamide and topical glaucoma medications was -1.6 +/- 1.5 mm Hg. Assess the statistical significance of the results.

*8.20 The change in intraocular pressure after administration of diflunisal among 30 patients whose standard therapy was topical drugs only was -0.7 +/-2.1 mm Hg. Assess the statistical significance of these results.

