

ME-340 LABORATORY PROBLEM
WEEK 6 WINTER-1999

Names: _____

- (1) An 02-series, 30-mm angular contact bearing operates at 1800 rpm. The bearing has operated at 18 kN for 25 minutes, 30 kN for 20 minutes; what is the expected remaining life if the load is increased to 45 kN?
- (2) A ball bearing is to carry a radial load of 8 kN and a thrust load of 4 kN. The design life is to be 5000 hr at 900 rpm. The reliability is 90% and the load light-to-medium impact. Select an LXX, 2XX, and a 3XX bearing for this application. If the reliability is increased to 99% select a bearing for the application.