

CE388 - FUNDAMENTALS OF STEEL DESIGN

2014-2015 Spring Term

Problem Set 4 - Answers

1)

Cases	Pc (kN)	Lp (mm)	Lr (mm)	C _b (x dir. Buckling)	Mc _x (kNm)	Mc _y (kNm)	Interaction	Condition
a – 1	419	1874.82	5928.19	1.39	221.39	0	0.92 < 1.0	OK
a – 2	419	1874.82	5928.19	1.36	216.61	0	1.36 > 1.0	Not OK
b - 1	852.17	1874.82	5928.19	2.06	323.487	56.68	1.15 > 1.0	Not OK
b - 2	852.17	1874.82	5928.19	2.06	323.487	56.68	0.89 < 1.0	OK

2)

