

Table 1: Solution Ratios - exercise 5b

Testcase	Approximation Ratio for Sum of Budgets	Approximation Ratio for LP value	Approximation Ratio for True Optimum
01	1.5	1.5	1.5
02	1.6	1.4414414414414414	1.0
03	1.0	1.0	1.0
04	1.0	1.0	1.0
05	1.676615353915591	1.5747286086136525	1.1138804064784058
06	1.8959974086862832	1.8416160781620199	1.2134629415210527
07	1.869868342665198	1.788371859644928	1.188336700280253
08	1.8717163080726575	1.8210869142669837	1.1172911452126923
09	1.9255863358974727	1.8445863816610903	1.1741227577271138
10	1.8700784460441322	1.7936675926228751	1.1049467485767623
11	1.7322477667985638	1.707923702668413	1.707923702668413
12	1.877720821467865	1.8651556793432735	1.8651556793432735
13	1.8688349902035393	1.867960168975866	1.867960168975866
14	1.9501146213455312	1.8954773575656736	1.5223714387077747
15	1.8946442488471158	1.8181999518669754	1.2683346131970592
16	1.7381712769616273	1.502750461950173	1.1405313044038945
17	1.8802210817212792	1.732374257731865	1.1429462796529837
18	1.7695373194452437	1.4986383989765146	1.1497625635656596
19	1.2812422316133385	1.0717951383989246	1.0687392618046092
20	1.7012521051475433	1.5451734113656768	1.1528641199946128