Tried aggregator 2 times.

MIP Presolve eliminated 962 rows and 4085 columns.

MIP Presolve modified 12600 coefficients.

Aggregator did 2 substitutions.

Reduced MIP has 7104 rows, 11659 columns, and 49597 nonzeros.

Reduced MIP has 11659 binaries, 0 generals, 0 SOSs, and 0 indicators.

Presolve time = 0.05 sec. (57.33 ticks)

Probing fixed 264 vars, tightened 0 bounds.

Probing time = 0.06 sec. (42.11 ticks)

Tried aggregator 1 time.

MIP Presolve eliminated 264 rows and 264 columns.

Reduced MIP has 6840 rows, 11395 columns, and 48046 nonzeros.

Reduced MIP has 11395 binaries, 0 generals, 0 SOSs, and 0 indicators.

Presolve time = 0.05 sec. (49.02 ticks)

Probing time = 0.02 sec. (5.61 ticks)

Clique table members: 29232.

MIP emphasis: balance optimality and feasibility.

MIP search method: dynamic search.

Parallel mode: deterministic, using up to 8 threads.

Root relaxation solution time = 0.88 sec. (637.09 ticks)

Nodes Cuts/

Node Left Objective IInf Best Integer Best Bound ItCnt Gap

0 0 594.0000 1715 594.0000 0

0 0 594.0000 1051 Cuts: 866 4398

0 0 594.0000 1416 Cuts: 1173 10780

0 0 594.0000 1429 Cuts: 727 17834

0 2 594.0000 822 594.0000 17845

Elapsed time = 64.03 sec. (34730.99 ticks, tree = 0.01 MB, solutions = 0)

1 3 594.0000 892 594.0000 30568

2 4 594.0000 1146 594.0000 37400

3 3 594.0000 915 594.0000 29856

5 7 594.0000 924 594.0000 56793

6 5 infeasible 594.0000 58415

10 4 594.0000 997 594.0000 37596

12 12 594.0000 931 594.0000 76158

14 14 594.0000 853 594.0000 77547

17 8 594.0000 915 594.0000 57951

35 29 594.0000 748 594.0000 90639

Elapsed time = 84.80 sec. (47894.09 ticks, tree = 0.22 MB, solutions = 0)

60 32 594.0000 671 594.0000 89067

141 78 594.0000 628 594.0000 139067

245 169 594.0000 650 594.0000 218780

262 179 infeasible 594.0000 239183

296 215 594.0000 541 594.0000 252700

387 249 594.0000 640 594.0000 271011

503 379 594.0000 472 594.0000 341744

584 446 594.0000 725 594.0000 360173

645 501 594.0000 673 594.0000 375351

699 585 594.0000 662 594.0000 406105

Elapsed time = 119.16 sec. (59513.44 ticks, tree = 3.33 MB, solutions = 0)

749 601 594.0000 596 594.0000 409093

884 685 594.0000 356 594.0000 429765

997 773 594.0000 647 594.0000 461103

1092 808 594.0000 386 594.0000 473054

1209 941 594.0000 576 594.0000 510724

1349 1151 594.0000 459 594.0000 576122

1496 1213 594.0000 449 594.0000 591941

1623 1286 594.0000 616 594.0000 610805

1731 1436 594.0000 588 594.0000 669546

1811 1494 594.0000 573 594.0000 681526

Elapsed time = 145.63 sec. (69115.64 ticks, tree = 9.83 MB, solutions = 0)

1841 1527 infeasible 594.0000 722052

1860 1648 infeasible 594.0000 763208

1881 1618 infeasible 594.0000 801985

1901 1592 infeasible 594.0000 880349

1931 1569 infeasible 594.0000 904384

1948 1599 594.0000 1044 594.0000 877428

1965 1548 infeasible 594.0000 942271

1981 1544 infeasible 594.0000 950553

1998 1523 infeasible 594.0000 986271

2019 1502 infeasible 594.0000 1029177

Elapsed time = 173.02 sec. (79304.89 ticks, tree = 9.46 MB, solutions = 0)

2039 1493 infeasible 594.0000 1065551

2053 1473 infeasible 594.0000 1100239

2068 1464 infeasible 594.0000 1146367

2082 1480 594.0000 738 594.0000 1172271

2110 1464 infeasible 594.0000 1255983

2126 1466 594.0000 761 594.0000 1259556

2144 1469 594.0000 845 594.0000 1277181

2160 1459 infeasible 594.0000 1324462

2175 1456 594.0000 770 594.0000 1357620

2182 1449 infeasible 594.0000 1397359

Elapsed time = 200.39 sec. (89356.22 ticks, tree = 9.20 MB, solutions = 0)

2197 1447 infeasible 594.0000 1402082

2208 1440 infeasible 594.0000 1449204

2225 1434 infeasible 594.0000 1488029

2236 1434 infeasible 594.0000 1529091

2262 1439 594.0000 952 594.0000 1498296

2286 1433 594.0000 629 594.0000 1586279

2310 1413 infeasible 594.0000 1581582

2326 1423 594.0000 849 594.0000 1647523

2345 1425 594.0000 800 594.0000 1650627

2371 1406 594.0000 669 594.0000 1731232

Elapsed time = 229.78 sec. (99425.74 ticks, tree = 8.98 MB, solutions = 0)

2395 1425 594.0000 717 594.0000 1736975

2419 1429 infeasible 594.0000 1739892

2439 1416 594.0000 667 594.0000 1838118

2456 1408 594.0000 817 594.0000 1828411

2470 1423 594.0000 706 594.0000 1773308

2490 1411 594.0000 810 594.0000 1890765

2508 1415 infeasible 594.0000 1912756

2533 1408 infeasible 594.0000 1918300

2560 1436 594.0000 828 594.0000 1935078

2587 1414 594.0000 747 594.0000 2057272

Elapsed time = 258.91 sec. (109347.11 ticks, tree = 8.66 MB, solutions = 0)

2613 1415 594.0000 720 594.0000 2052596

2645 1375 594.0000 604 594.0000 2152653

2674 1363 infeasible 594.0000 2168521

2689 1379 594.0000 571 594.0000 2158799

2698 1417 594.0000 701 594.0000 2053951

2708 1367 594.0000 946 594.0000 2179710

2726 1348 infeasible 594.0000 2240696

2742 1360 594.0000 1117 594.0000 2176746

2760 1363 594.0000 661 594.0000 2257514

2774 1354 594.0000 680 594.0000 2304409

Elapsed time = 286.89 sec. (119808.93 ticks, tree = 8.30 MB, solutions = 0)

2788 1362 594.0000 669 594.0000 2340850

2804 1358 infeasible 594.0000 2354677

2824 1389 594.0000 564 594.0000 2438987

2847 1380 infeasible 594.0000 2472151

2854 1365 594.0000 1003 594.0000 2373458

2867 1395 594.0000 837 594.0000 2492643

2882 1398 594.0000 778 594.0000 2495283

2902 1388 594.0000 1133 594.0000 2485122

2914 1401 594.0000 766 594.0000 2588495

2929 1405 594.0000 762 594.0000 2590937

Elapsed time = 317.89 sec. (130144.28 ticks, tree = 8.43 MB, solutions = 0)

2948 1399 infeasible 594.0000 2653708

2959 1404 infeasible 594.0000 2611523

2976 1433 594.0000 708 594.0000 2701940

2999 1410 594.0000 582 594.0000 2678761

3038 1469 594.0000 615 594.0000 2756094

3065 1471 infeasible 594.0000 2761511

3083 1446 594.0000 1156 594.0000 2740410

3116 1490 594.0000 768 594.0000 2786523

3207 1499 594.0000 887 594.0000 2792040

3504 1723 594.0000 905 594.0000 2929684

Elapsed time = 357.03 sec. (143000.33 ticks, tree = 10.84 MB, solutions = 0)

3788 1979 infeasible 594.0000 3039951

3980 2055 infeasible 594.0000 3113174

4057 2155 infeasible 594.0000 3242353

4079 2171 infeasible 594.0000 3343712

4107 2160 infeasible 594.0000 3391555

4139 2112 infeasible 594.0000 3616869

4161 2099 infeasible 594.0000 3761387

4183 2076 infeasible 594.0000 3987449

4211 2065 infeasible 594.0000 4054817

4232 2073 594.0000 1082 594.0000 4009465

Elapsed time = 478.70 sec. (183611.26 ticks, tree = 12.07 MB, solutions = 0)

4252 2040 infeasible 594.0000 4182359

4275 2006 infeasible 594.0000 4333448

4284 2006 infeasible 594.0000 4346313

4302 1996 infeasible 594.0000 4386747

4322 1979 infeasible 594.0000 4476013

4346 1974 infeasible 594.0000 4499242

4377 1969 infeasible 594.0000 4580692

4411 1909 infeasible 594.0000 4822781

4450 1883 infeasible 594.0000 4900557

4473 1867 infeasible 594.0000 4953209

Elapsed time = 606.67 sec. (224821.20 ticks, tree = 10.92 MB, solutions = 0)

4493 1841 infeasible 594.0000 5102087

4514 1835 infeasible 594.0000 5125060

4524 1822 594.0000 1212 594.0000 5296442

4535 1818 594.0000 1074 594.0000 5276824

4545 1823 594.0000 1309 594.0000 5313216

4565 1818 594.0000 1343 594.0000 5387737

4575 1816 infeasible 594.0000 5596944

4590 1824 594.0000 1390 594.0000 5570296

4609 1826 594.0000 1235 594.0000 5675312

4622 1827 594.0000 1413 594.0000 5664596

Elapsed time = 740.63 sec. (265952.66 ticks, tree = 10.79 MB, solutions = 0)

4637 1814 594.0000 1243 594.0000 5809354

4652 1810 594.0000 1242 594.0000 5859114

4667 1807 594.0000 871 594.0000 5971853

4683 1818 594.0000 1259 594.0000 6007714

4696 1806 infeasible 594.0000 6160038

4714 1806 infeasible 594.0000 6130957

4732 1810 594.0000 1275 594.0000 6153817

4750 1804 infeasible 594.0000 6452265

4764 1800 594.0000 987 594.0000 6433790

4778 1804 594.0000 1002 594.0000 6472266

Elapsed time = 877.41 sec. (306018.99 ticks, tree = 10.74 MB, solutions = 0)

4795 1809 infeasible 594.0000 6556292

4821 1805 infeasible 594.0000 6718357

4856 1811 594.0000 1280 594.0000 6676095

4869 1825 594.0000 1067 594.0000 6842882

4884 1826 594.0000 979 594.0000 6816907

4909 1818 infeasible 594.0000 6902982

4934 1853 594.0000 1112 594.0000 7070836

4963 1860 594.0000 825 594.0000 7139609

4981 1842 594.0000 1133 594.0000 7129985

5009 1869 594.0000 775 594.0000 7158353

Elapsed time = 1008.55 sec. (345256.74 ticks, tree = 11.73 MB, solutions = 0)

5060 1880 594.0000 1155 594.0000 7367674

5094 1845 infeasible 594.0000 7325989

5124 1918 594.0000 952 594.0000 7492829

5144 1920 594.0000 860 594.0000 7592999

5181 1921 594.0000 892 594.0000 7474505

5214 1941 infeasible 594.0000 7672642

5246 1973 infeasible 594.0000 7860962

5276 1967 594.0000 758 594.0000 7843951

5316 1981 infeasible 594.0000 7879102

5357 2016 infeasible 594.0000 8061658

Elapsed time = 1131.95 sec. (384920.00 ticks, tree = 28.72 MB, solutions = 0)

5392 2016 infeasible 594.0000 8070692

5436 2001 infeasible 594.0000 7958590

5470 2030 594.0000 962 594.0000 8125887

5518 2041 594.0000 963 594.0000 8133763

5559 2026 594.0000 903 594.0000 8212536

5574 2046 infeasible 594.0000 8338649

5619 2051 594.0000 769 594.0000 8347142

5688 2115 594.0000 396 594.0000 8549590

5763 2148 594.0000 366 594.0000 8562186

5814 2175 594.0000 520 594.0000 8572160

Elapsed time = 1258.91 sec. (423502.96 ticks, tree = 38.73 MB, solutions = 0)

5893 2244 594.0000 443 594.0000 8755921

5978 2120 594.0000 1015 594.0000 8699373

6122 2231 infeasible 594.0000 8796723

6323 2232 594.0000 562 594.0000 8820781

6720 2270 594.0000 547 594.0000 8874795

7179 2306 infeasible 594.0000 8991446

7526 2451 594.0000 488 594.0000 9052868

7633 2407 infeasible 594.0000 9072591

\* 7688+ 0 594.0000 594.0000 0.00%

7688 0 cutoff 594.0000 594.0000 9862345 0.00%

GUB cover cuts applied: 95

Clique cuts applied: 964

Cover cuts applied: 588

Implied bound cuts applied: 277

Flow cuts applied: 49

Mixed integer rounding cuts applied: 259

Zero-half cuts applied: 98

Root node processing (before b&c):

Real time = 63.86 sec. (34605.09 ticks)

Parallel b&c, 8 threads:

Real time = 4373.83 sec. (1703922.28 ticks)

Sync time (average) = 99.94 sec.

Wait time (average) = 0.00 sec.

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Total (root+branch&cut) = 4437.69 sec. (1738527.37 ticks)