```
>> a6_3_11_c
警告: A non-empty cvx problem already exists in this scope.
    It is being overwritten.
> In cvxprob (line 28)
  In cvx_begin (line 41)
  In a6_3_11_c (line 7)

Calling SDPT3 4.0: 7 variables, 3 equality constraints
    For improved efficiency, SDPT3 is solving the dual problem.
------------------------------------------------------------


 num. of constraints =  3
 dim. of socp    var  =  4,    num. of socp blk  =  1
 dim. of linear var  =  3
*****************************************************************
    SDPT3: Infeasible path-following algorithms
*****************************************************************
 version   predcorr   gam   expon   scale_data
     NT         1        0.000    1            0
it pstep dstep pinfeas dinfeas  gap          prim-obj          dual-obj       cputime
-----------------------------------------------------------------
 0|0.000|0.000|1.1e+00|2.4e+00|1.0e+03| 1.315066e+02   0.000000e+00| 0:0:00| chol  1  1
 1|0.799|0.801|2.2e-01|5.0e-01|2.5e+02| 5.651837e+01   4.197401e+00| 0:0:00| chol  1  1
 2|0.973|0.977|6.1e-03|1.4e-02|6.6e+01| 2.576591e+01 -3.421416e+01| 0:0:00| chol  1  1
 3|0.951|0.929|3.0e-04|2.5e-03|4.3e+00|-3.025631e+01 -3.389872e+01| 0:0:00| chol  1  1
 4|1.000|0.720|5.6e-07|7.8e-04|9.9e-01|-3.241617e+01 -3.321973e+01| 0:0:00| chol  1  1
 5|0.769|1.000|1.7e-07|3.1e-06|3.6e-01|-3.283336e+01 -3.319235e+01| 0:0:00| chol  1  1
 6|1.000|0.886|1.9e-08|6.6e-07|5.5e-02|-3.301505e+01 -3.306952e+01| 0:0:00| chol  1  1
 7|0.890|1.000|4.5e-09|3.4e-08|1.3e-02|-3.303758e+01 -3.305080e+01| 0:0:00| chol  1  1
 8|0.984|0.978|4.1e-10|4.6e-09|2.5e-04|-3.304487e+01 -3.304512e+01| 0:0:00| chol  1  1
 9|0.986|0.966|8.5e-12|2.4e-10|6.0e-06|-3.304500e+01 -3.304500e+01| 0:0:00| chol  1  1
10|1.000|0.953|5.4e-13|1.3e-11|6.1e-07|-3.304500e+01 -3.304500e+01| 0:0:00|
  stop: max(relative gap, infeasibilities) < 1.49e-08
-----------------------------------------------------------------


 number of iterations   = 10
 primal objective value = -3.30449996e+01
 dual   objective value = -3.30450002e+01
 gap := trace(XZ)       = 6.14e-07
 relative gap           = 9.16e-09
 actual relative gap    = 9.10e-09
 rel. primal infeas (scaled problem)   = 5.36e-13
 rel. dual      "       "      "       = 1.29e-11
 rel. primal infeas (unscaled problem) = 0.00e+00
 rel. dual      "       "      "       = 0.00e+00
```

```
 norm(X), norm(y), norm(Z) = 1.1e+02, 8.5e+00, 1.2e+01
 norm(A), norm(b), norm(C) = 3.8e+00, 5.3e+01, 6.7e+00
 Total CPU time (secs)   = 0.12
 CPU time per iteration = 0.01
 termination code        =  0
 DIMACS: 7.3e-13  0.0e+00  1.5e-11  0.0e+00  9.1e-09  9.2e-09
------------------------------------------------------------------------

------------------------------------------------------------
Status: Solved
Optimal value (cvx_optval): +0.0450002
```