```
>> a6_3_10_b
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_10_b (line 6)

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|5.0e+00|3.5e+00|3.4e+02|-2.078461e+01   0.000000e+00| 0:0:01| chol  1  1
 1|0.629|0.669|1.8e+00|1.2e+00|1.5e+02| 1.101727e+01   7.161411e+00| 0:0:02| chol  1  1
 2|1.000|1.000|2.4e-07|3.5e-03|3.9e+01| 3.729805e+01  -1.455003e+00| 0:0:02| chol  1  1
 3|0.683|1.000|2.0e-07|3.5e-04|1.9e+01| 2.026292e+01   1.434593e+00| 0:0:02| chol  1  1
 4|0.956|0.916|2.4e-08|6.2e-05|1.5e+00| 9.911163e+00   8.432932e+00| 0:0:02| chol  1  1
 5|0.947|0.920|2.4e-09|8.1e-06|2.1e-01| 8.961856e+00   8.754128e+00| 0:0:03| chol  1  1
 6|0.956|1.000|2.0e-09|3.5e-07|4.5e-02| 8.847902e+00   8.803164e+00| 0:0:03| chol  1  1
 7|1.000|0.939|7.3e-10|5.5e-08|5.0e-03| 8.824244e+00   8.819281e+00| 0:0:03| chol  1  1
 8|0.932|1.000|6.9e-10|3.6e-09|4.8e-04| 8.821735e+00   8.821255e+00| 0:0:03| chol  1  1
 9|0.988|0.984|4.7e-11|2.0e-10|6.5e-06| 8.821433e+00   8.821426e+00| 0:0:03| chol  1  1
10|1.000|0.965|7.7e-14|1.6e-11|2.4e-07| 8.821429e+00   8.821428e+00| 0:0:03|
   stop: max(relative gap, infeasibilities) < 1.49e-08
-------------------------------------------------------------------
```

```
number of iterations      = 10
primal objective value =    8.82142870e+00
dual     objective value =    8.82142847e+00
gap := trace(XZ)          = 2.36e-07
relative gap              = 1.27e-08
actual relative gap       = 1.26e-08
rel. primal infeas (scaled problem)     = 7.75e-14
rel. dual         "          "          = 1.63e-11
rel. primal infeas (unscaled problem) = 0.00e+00
rel. dual         "          "          = 0.00e+00
norm(X), norm(y), norm(Z) = 7.2e+00, 3.0e+00, 4.8e+00
norm(A), norm(b), norm(C) = 4.5e+00, 8.7e+00, 5.7e+00
Total CPU time (secs)    = 2.54
CPU time per iteration = 0.25
termination code         =   0
 DIMACS: 1.1e-13   0.0e+00   1.8e-11   0.0e+00   1.3e-08   1.3e-08
-------------------------------------------------------------------


-----------------------------------------------------------------
Status: Solved
Optimal value (cvx_optval): -2.32143
```