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>> %compute problem in Example 5.3
>> [prob,para] = P_5_3; %(m,d)=(16,4)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using DSOS is
83.5
Elapsed time is 2.499853 seconds.
>> [prob,para] = P_5_3; %(m,d)=(10,6)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using DSOS is
47.5002
Elapsed time is 6.047942 seconds.
>> [prob,para] = P_5_3; %(m,d)=(20,4)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using DSOS is
107.5
Elapsed time is 5.160596 seconds.
>> [prob,para] = P_5_3; %(m,d)=(12,6)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using DSOS is
59.5002
Elapsed time is 15.488441 seconds.
>> [prob,para] = P_5_3; %(m,d)=(10,8)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using DSOS is
47.5311
Elapsed time is 116.898030 seconds.
>> [prob,para] = P_5_3; %(m,d)=(12,8)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using DSOS is
59.5733
Elapsed time is 428.773209 seconds.
>>
>> % compute r^sdsos_1
>> [prob,para] = P_5_3; %(m,d)=(16,4)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using SDSOS is
102.7951
Elapsed time is 3.313506 seconds.
>> [prob,para] = P_5_3; %(m,d)=(10,6)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using SDSOS is
55.2534
Elapsed time is 9.564558 seconds.
>> [prob,para] = P_5_3; %(m,d)=(20,4)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using SDSOS is
131.0663
Elapsed time is 6.846086 seconds.
>> [prob,para] = P_5_3; %(m,d)=(12,6)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using SDSOS is
67.405
Elapsed time is 23.797675 seconds.
>> [prob,para] = P_5_3; %(m,d)=(10,8)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using SDSOS is
51.8288
Elapsed time is 158.607327 seconds.
>> [prob,para] = P_5_3; %(m,d)=(12,8)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using SDSOS is
63.0883
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Elapsed time is 645.114670 seconds.
>>
>> % compute r^primal_1
>> [prob,para] = P_5_3; %(m,d)=(16,4)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using SOS is
102.7951
Elapsed time is 8.496862 seconds.
>> [prob,para] = P_5_3; %(m,d)=(10,6)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using SOS is
55.2533
Elapsed time is 40.453776 seconds.
>> [prob,para] = P_5_3; %(m,d)=(20,4)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using SOS is
131.0663
Elapsed time is 58.538583 seconds.
>> [prob,para] = P_5_3; %(m,d)=(12,6)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using SOS is
67.405
Elapsed time is 433.100449 seconds.
>> [prob,para] = P_5_3; %(m,d)=(10,8)
>> tic; fsippsolve(prob,para,1); toc;
The optimal value of the 1-th primal SDP relaxation (P_k) using SOS is
51.8289
Elapsed time is 30465.106499 seconds.
>>
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