```
>> L1

AB =

     1    23     6
    48   -23   -29
   -65    41    30


BA =

    18   -17   -29
    -4     7   -41
    38   -23   -17


check_a =

    17   -40   -35
   -52    30   -12
   103   -64   -47


check_b =

     0     0     0
     0     0     0
     0     0     0


check_c =

     0     0     0
     0     0     0
     0     0     0


check_d1 =

     0     0     0
     0     0     0
     0     0     0


check_d2 =
```

```
    -17     52   -103
     40    -30     64
     35     12     47
```

A_in =

```
    0.3462   -0.5385   -0.4231
    0.2051   -0.6154   -0.4359
    0.0256   -0.0769   -0.1795
```

B_in =

```
    0.1552   -0.0920    0.0747
    0.2586   -0.2644   -0.0977
   -0.0172    0.1954    0.0287
```

AB_in =

```
    0.0368   -0.0327   -0.0390
    0.0328    0.0309    0.0234
    0.0349   -0.1132   -0.0830
```

check_e1 =

```
    0.1150   -0.0606   -0.1053
    0.1526   -0.0277   -0.0396
    0.0477   -0.0961   -0.0873
```

check_e2 =

```
   1.0e-16 *

   -0.0694    0.0694         0
   -0.2082    0.1388    0.1041
    0.1388    0.1388   -0.1388
```

dA =

```
    78
```

```
dB =

    174


dAB =

    1.3572e+04


check_f =

    3.6380e-12


check_g =

    -2.8422e-14

>>
```