insert n >> 4

insert alpha >> 2

8 4 2 1

1 2 4 8

1 2 8 4

1 4 2 8

1 4 8 2

1 8 4 2

1 8 2 4

2 1 4 8

2 1 8 4

2 4 1 8

2 4 8 1

2 8 4 1

2 8 1 4

4 2 1 8

4 2 8 1

4 1 2 8

4 1 8 2

4 8 1 2

4 8 2 1

8 2 4 1

8 2 1 4

8 4 2 1

8 4 1 2

8 1 4 2

8 1 2 4

[1, -a*ks, 0,   0, 0,   0, 0,   0]

[1,   -ks, -1,   0, 0,   0, 0,   0]

[0, 2*a*ks, 1, -2*a*ks, 0,   0, 0,   0]

[0,   0, 1,   -ks, -1,   0, 0,   0]

[0,   0, 0, 4*a*ks, 1, -4*a*ks, 0,   0]

[0,   0, 0,   0, 1,   -ks, -1,   0]

[0,   0, 0,   0, 0, 8*a*ks, 1, -8*a*ks]

[0,   0, 0,   0, 0,   0, 1,   -ks]

[1, -a*ks, 0,   0, 0,   0, 0,   0]

[1,   -ks, -1,   0, 0,   0, 0,   0]

[0, 2*a*ks, 1, -2*a*ks, 0,   0, 0,   0]

[0,   0, 1,   -ks, -1,   0, 0,   0]

[0,   0, 0, 8*a*ks, 1, -8*a*ks, 0,   0]

[0,   0, 0,   0, 1,   -ks, -1,   0]

[0,   0, 0,   0, 0, 4*a*ks, 1, -4*a*ks]

[0,   0, 0,   0, 0,   0, 1,   -ks]

[1, -a*ks, 0,   0, 0,   0, 0,   0]

[1,   -ks, -1,   0, 0,   0, 0,   0]

[0, 4*a*ks, 1, -4*a*ks, 0,   0, 0,   0]

[0,   0, 1,   -ks, -1,   0, 0,   0]

[0,   0, 0, 2*a*ks, 1, -2*a*ks, 0,   0]

[0,   0, 0,   0, 1,   -ks, -1,   0]

[0,   0, 0,   0, 0, 8*a*ks, 1, -8*a*ks]

[0,   0, 0,   0, 0,   0, 1,   -ks]

[1, -a*ks, 0,   0, 0,   0, 0,   0]

[1,   -ks, -1,   0, 0,   0, 0,   0]

[0, 4*a*ks, 1, -4*a*ks, 0,   0, 0,   0]

[0,   0, 1,   -ks, -1,   0, 0,   0]

[0,   0, 0, 8*a*ks, 1, -8*a*ks, 0,   0]

[0,   0, 0,   0, 1,   -ks, -1,   0]

[0,   0, 0,   0, 0, 2*a*ks, 1, -2*a*ks]

[0,   0, 0,   0, 0,   0, 1,   -ks]

[1, -a*ks, 0,   0, 0,   0, 0,   0]

[1,   -ks, -1,   0, 0,   0, 0,   0]

[0, 8*a*ks, 1, -8*a*ks, 0,   0, 0,   0]

[0,   0, 1,   -ks, -1,   0, 0,   0]

[0,   0, 0, 4*a*ks, 1, -4*a*ks, 0,   0]

[0,   0, 0,   0, 1,   -ks, -1,   0]

[0,   0, 0,   0, 0, 2*a*ks, 1, -2*a*ks]

[0,   0, 0,   0, 0,   0, 1,   -ks]

[1, -a*ks, 0,   0, 0,   0, 0,   0]

[1,   -ks, -1,   0, 0,   0, 0,   0]

[0, 8*a*ks, 1, -8*a*ks, 0,   0, 0,   0]

[0,   0, 1,   -ks, -1,   0, 0,   0]

[0,   0, 0, 2*a*ks, 1, -2*a*ks, 0,   0]

[0,   0, 0,   0, 1,   -ks, -1,   0]

[0,   0, 0,   0, 0, 4*a*ks, 1, -4*a*ks]

[0,   0, 0,   0, 0,   0, 1,   -ks]

[1, -2*a*ks, 0,   0, 0,   0, 0,   0]

[1,   -ks, -1,   0, 0,   0, 0,   0]

[0,   a*ks, 1, -a*ks, 0,   0, 0,   0]

[0,   0, 1,   -ks, -1,   0, 0,   0]

[0, 0, 0, 4*a*ks, 1, -4*a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, 8*a*ks, 1, -8*a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -2*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, a*ks, 1, -a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, 8*a*ks, 1, -8*a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, 4*a*ks, 1, -4*a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -2*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, 4*a*ks, 1, -4*a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, a*ks, 1, -a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, 8*a*ks, 1, -8*a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -2*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, 4*a*ks, 1, -4*a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, 8*a*ks, 1, -8*a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, a*ks, 1, -a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -2*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, 8*a*ks, 1, -8*a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, 4*a*ks, 1, -4*a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, a*ks, 1, -a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -2*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, 8*a*ks, 1, -8*a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, a*ks, 1, -a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, 4*a*ks, 1, -4*a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -4*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, 2*a*ks, 1, -2*a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, a*ks, 1, -a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, 8*a*ks, 1, -8*a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -4*a*ks, 0,   0, 0,   0, 0,   0]

[1,   -ks, -1,   0, 0,   0, 0,   0]

[0, 2*a*ks, 1, -2*a*ks, 0,   0, 0,   0]

[0,   0, 1,   -ks, -1,   0, 0,   0]

[0,   0, 0, 8*a*ks, 1, -8*a*ks, 0,   0]

[0,   0, 0,   0, 1,   -ks, -1,   0]

[0,   0, 0,   0, 0,   a*ks, 1, -a*ks]

[0,   0, 0,   0, 0,   0, 1,   -ks]

[1, -4*a*ks, 0,   0, 0,   0, 0,   0]

[1,   -ks, -1,   0, 0,   0, 0,   0]

[0,   a*ks, 1, -a*ks, 0,   0, 0,   0]

[0,   0, 1,   -ks, -1,   0, 0,   0]

[0,   0, 0, 2*a*ks, 1, -2*a*ks, 0,   0]

[0,   0, 0,   0, 1,   -ks, -1,   0]

[0,   0, 0,   0, 0, 8*a*ks, 1, -8*a*ks]

[0,   0, 0,   0, 0,   0, 1,   -ks]

[1, -4*a*ks, 0,   0, 0,   0, 0,   0]

[1,   -ks, -1,   0, 0,   0, 0,   0]

[0,   a*ks, 1, -a*ks, 0,   0, 0,   0]

[0,   0, 1,   -ks, -1,   0, 0,   0]

[0,   0, 0, 8*a*ks, 1, -8*a*ks, 0,   0]

[0,   0, 0,   0, 1,   -ks, -1,   0]

[0,   0, 0,   0, 0, 2*a*ks, 1, -2*a*ks]

[0,   0, 0,   0, 0,   0, 1,   -ks]

[1, -4*a*ks, 0,   0, 0,   0, 0,   0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, 8*a*ks, 1, -8*a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, a*ks, 1, -a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, 2*a*ks, 1, -2*a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -4*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, 8*a*ks, 1, -8*a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, 2*a*ks, 1, -2*a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, a*ks, 1, -a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -8*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, 2*a*ks, 1, -2*a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, 4*a*ks, 1, -4*a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, a*ks, 1, -a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -8*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, 2*a*ks, 1, -2*a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, a*ks, 1, -a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, 4*a*ks, 1, -4*a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -8*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, 4*a*ks, 1, -4*a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, 2*a*ks, 1, -2*a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, a*ks, 1, -a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -8*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, 4*a*ks, 1, -4*a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, a*ks, 1, -a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, 2*a*ks, 1, -2*a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -8*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, a*ks, 1, -a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, 4*a*ks, 1, -4*a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, 2*a*ks, 1, -2*a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

[1, -8*a*ks, 0, 0, 0, 0, 0, 0]

[1, -ks, -1, 0, 0, 0, 0, 0]

[0, a*ks, 1, -a*ks, 0, 0, 0, 0]

[0, 0, 1, -ks, -1, 0, 0, 0]

[0, 0, 0, 2*a*ks, 1, -2*a*ks, 0, 0]

[0, 0, 0, 0, 1, -ks, -1, 0]

[0, 0, 0, 0, 0, 4*a*ks, 1, -4*a*ks]

[0, 0, 0, 0, 0, 0, 1, -ks]

Columns 1 through 13

5.5482 5.4345 5.2212 4.8783 4.7199 4.9488 5.0547 4.9282 4.1099 3.1510 3.0088 3.8407 3.9649

Columns 14 through 24

2.9481 4.5621 4.1568 3.1770 2.5732 2.7490 3.6506 2.5226 3.1369 3.9342 4.2128

Rm(min) = 2.5226

insert beta >> 2

Abr1 =

0.3323 0.1662 0.0831 0.0415

Abr2 =

0.6647 0.3323 0.1662 0.0831