אלגברה ב' - תרגילים על חישוב בסיס ז'ורדן

לא להגשה

תרגילים

תרגיל 1 (בסיס ז'ורדן למטריצות נילפוטנטיות). עבור כל אחת מהמטריצות הנילפוטנטיות A הבאות, מיצאו מטריצה P הפיכה עבורה $P^{-1}AP$ מטריצת ז'ורדן, ומיצאו את צורת ז'ורדן של A.

.1

$$A = \begin{pmatrix} -1 & 1 \\ -1 & 1 \end{pmatrix}$$

.2

$$A = \begin{pmatrix} 2 & 1 \\ -4 & -2 \end{pmatrix}$$

.3

$$A = \begin{pmatrix} 0 & 0 \\ 1 & 0 \end{pmatrix}$$

.4

$$A = \begin{pmatrix} -1 & -1 \\ 1 & 1 \end{pmatrix}$$

.5

$$A = \begin{pmatrix} 0 & -1 \\ 0 & 0 \end{pmatrix}$$

.6

$$A = \begin{pmatrix} 1 & 1 \\ -1 & -1 \end{pmatrix}$$

.7

$$A = \begin{pmatrix} 1 & -1 \\ 1 & -1 \end{pmatrix}$$

.8

$$A = \begin{pmatrix} 0 & 0 \\ -1 & 0 \end{pmatrix}$$

.9

$$A = \begin{pmatrix} -2 & -1 \\ 4 & 2 \end{pmatrix}$$

.10

$$A = \begin{pmatrix} 2 & -1 \\ 4 & -2 \end{pmatrix}$$

.11

$$A = \begin{pmatrix} 2 & -4 \\ 1 & -2 \end{pmatrix}$$

.12

$$A = \begin{pmatrix} 6 & -4 \\ 9 & -6 \end{pmatrix}$$

.13

$$A = \begin{pmatrix} -2 & -4 \\ 1 & 2 \end{pmatrix}$$

.14

$$A = \begin{pmatrix} 2 & 4 \\ -1 & -2 \end{pmatrix}$$

.15

$$A = \begin{pmatrix} -2 & 4 \\ -1 & 2 \end{pmatrix}$$

.16

$$A = \begin{pmatrix} 3 & 9 \\ -1 & -3 \end{pmatrix}$$

.17

$$A = \begin{pmatrix} -2 & 1 \\ -4 & 2 \end{pmatrix}$$

.18

$$A = \begin{pmatrix} -3 & 9 \\ -1 & 3 \end{pmatrix}$$

.19

$$A = \begin{pmatrix} 3 & 1 \\ -9 & -3 \end{pmatrix}$$

.20

$$A = \begin{pmatrix} -6 & 9 \\ -4 & 6 \end{pmatrix}$$

.21

$$A = \begin{pmatrix} 1 & 1 & 1 \\ -1 & -1 & -1 \\ 0 & 0 & 0 \end{pmatrix}$$

.22

$$A = \begin{pmatrix} 3 & 1 & -2 \\ -5 & -1 & 6 \\ 1 & 0 & -2 \end{pmatrix}$$

.23

$$A = \begin{pmatrix} 0 & 0 & 0 \\ 0 & -1 & 1 \\ 0 & -1 & 1 \end{pmatrix}$$

.24

$$A = \begin{pmatrix} 0 & 2 & 3 \\ 1 & -5 & -8 \\ -1 & 3 & 5 \end{pmatrix}$$

.25

$$A = \begin{pmatrix} 1 & 0 & 1 \\ 1 & 1 & 2 \\ -1 & -1 & -2 \end{pmatrix}$$

.26

$$A = \begin{pmatrix} 15 & 9 & -12 \\ 5 & 3 & -4 \\ 22 & 15 & -18 \end{pmatrix}$$

.27

$$A = \begin{pmatrix} 6 & 11 & 9 \\ 0 & 0 & 0 \\ -4 & -7 & -6 \end{pmatrix}$$

.28

$$A = \begin{pmatrix} 0 & 0 & 0 \\ -6 & -6 & 4 \\ -9 & -9 & 6 \end{pmatrix}$$

.29

$$A = \begin{pmatrix} 1 & 0 & -1 \\ -1 & 0 & 1 \\ 1 & 0 & -1 \end{pmatrix}$$

.30

$$A = \begin{pmatrix} -2 & 2 & 1 \\ -6 & 6 & 3 \\ 8 & -8 & -4 \end{pmatrix}$$

.31

$$A = \begin{pmatrix} -2 & 2 & 1 \\ -2 & 2 & 1 \\ 0 & 0 & 0 \end{pmatrix}$$

.32

$$A = \begin{pmatrix} 0 & 1 & 0 \\ -1 & -3 & -1 \\ 3 & 8 & 3 \end{pmatrix}$$

.33

$$A = \begin{pmatrix} 0 & 0 & 0 \\ -1 & 0 & 0 \\ 0 & 0 & 0 \end{pmatrix}$$

.34

$$A = \begin{pmatrix} 3 & -3 & -4 \\ 2 & -2 & -3 \\ 1 & -1 & -1 \end{pmatrix}$$

.35

$$A = \begin{pmatrix} 5 & 1 & 2 \\ -9 & -3 & -2 \\ -7 & -2 & -2 \end{pmatrix}$$

.36

$$A = \begin{pmatrix} 10 & -15 & -10 \\ -4 & 6 & 4 \\ 16 & -24 & -16 \end{pmatrix}$$

.37

$$A = \begin{pmatrix} 9 & 3 & 9 \\ 9 & 3 & 9 \\ -12 & -4 & -12 \end{pmatrix}$$

.38

$$A = \begin{pmatrix} 3 & -6 & 1 \\ 1 & -2 & 0 \\ -1 & 2 & -1 \end{pmatrix}$$

.39

$$A = \begin{pmatrix} 6 & -6 & -9 \\ 0 & 0 & 0 \\ 4 & -4 & -6 \end{pmatrix}$$

.40

$$A = \begin{pmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 2 & 3 & 0 \end{pmatrix}$$

.41

$$A = \begin{pmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ -1 & -1 & 0 \end{pmatrix}$$

.42

$$A = \begin{pmatrix} -1 & 1 & 1 \\ -1 & 1 & 1 \\ 0 & 0 & 0 \end{pmatrix}$$

.43

$$A = \begin{pmatrix} -8 & 18 & 4 \\ -3 & 6 & 2 \\ -4 & 9 & 2 \end{pmatrix}$$

.44

$$A = \begin{pmatrix} 1 & -1 & -2 \\ 1 & -1 & -2 \\ 0 & 0 & 0 \end{pmatrix}$$

.45

$$A = \begin{pmatrix} 6 & 3 & -6 \\ -4 & -2 & 4 \\ 4 & 2 & -4 \end{pmatrix}$$

.46

$$A = \begin{pmatrix} 0 & 1 & 3 \\ 0 & 0 & 1 \\ 0 & 0 & 0 \end{pmatrix}$$

.47

$$A = \begin{pmatrix} 0 & 0 & 0 \\ -2 & 2 & -1 \\ -3 & 4 & -2 \end{pmatrix}$$

.48

$$A = \begin{pmatrix} 2 & 1 & 0 \\ -4 & -2 & 0 \\ -4 & -2 & 0 \end{pmatrix}$$

.49

$$A = \begin{pmatrix} 3 & 1 & -1 \\ -6 & -2 & 2 \\ 3 & 1 & -1 \end{pmatrix}$$

.50

$$A = \begin{pmatrix} -9 & -6 & -9 \\ -9 & -6 & -9 \\ 15 & 10 & 15 \end{pmatrix}$$

.51

$$A = \begin{pmatrix} 15 & 10 & 3 \\ -24 & -16 & -5 \\ 3 & 2 & 1 \end{pmatrix}$$

.52

$$A = \begin{pmatrix} -6 & -2 & -6 \\ 9 & 3 & 9 \\ 3 & 1 & 3 \end{pmatrix}$$

.53

$$A = \begin{pmatrix} 2 & 0 & 4 \\ -1 & 0 & -2 \\ -1 & 0 & -2 \end{pmatrix}$$

.54

$$A = \begin{pmatrix} -1 & -1 & 1 \\ 0 & 0 & 0 \\ -1 & -1 & 1 \end{pmatrix}$$

.55

$$A = \begin{pmatrix} 2 & 4 & 4 \\ 1 & 2 & 2 \\ -2 & -4 & -4 \end{pmatrix}$$

.56

$$A = \begin{pmatrix} 0 & 1 & 0 \\ 0 & 0 & 0 \\ -1 & -1 & 0 \end{pmatrix}$$

.57

$$A = \begin{pmatrix} 15 & -5 & -15 \\ -27 & 9 & 27 \\ 24 & -8 & -24 \end{pmatrix}$$

.58

$$A = \begin{pmatrix} -1 & 2 & 1 \\ -1 & 2 & 1 \\ 1 & -2 & -1 \end{pmatrix}$$

.59

$$A = \begin{pmatrix} 3 & -9 & 0 \\ 1 & -3 & 0 \\ -4 & 12 & 0 \end{pmatrix}$$

.60

$$A = \begin{pmatrix} -4 & -1 & 0 \\ 12 & 6 & 8 \\ -5 & -2 & -2 \end{pmatrix}$$

.61

$$A = \begin{pmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ -2 & 3 & 0 \end{pmatrix}$$

.62

$$A = \begin{pmatrix} -2 & 1 & 0 \\ -4 & 2 & 1 \\ 0 & 0 & 0 \end{pmatrix}$$

.63

$$A = \begin{pmatrix} 1 & 1 & -1 \\ -1 & -1 & 0 \\ 0 & 0 & 0 \end{pmatrix}$$

.64

$$A = \begin{pmatrix} 1 & -1 & 3 \\ -2 & 0 & -2 \\ -1 & 0 & -1 \end{pmatrix}$$

.65

$$A = \begin{pmatrix} 0 & -1 & 1 \\ 2 & 1 & -3 \\ 1 & 0 & -1 \end{pmatrix}$$

.66

$$A = \begin{pmatrix} 3 & -6 & -1 \\ 6 & -8 & -1 \\ -21 & 34 & 5 \end{pmatrix}$$

.67

$$A = \begin{pmatrix} 12 & -8 & -12 \\ 9 & -6 & -9 \\ 6 & -4 & -6 \end{pmatrix}$$

.68

$$A = \begin{pmatrix} 2 & 4 & -4 \\ -3 & -6 & 6 \\ -2 & -4 & 4 \end{pmatrix}$$

.69

$$A = \begin{pmatrix} -8 & -8 & -12 \\ 2 & 2 & 3 \\ 4 & 4 & 6 \end{pmatrix}$$

.70

$$A = \begin{pmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 1 & 0 \end{pmatrix}$$

.71

$$A = \begin{pmatrix} 6 & 0 & 9 \\ 12 & 0 & 18 \\ -4 & 0 & -6 \end{pmatrix}$$

.72

$$A = \begin{pmatrix} 1 & -1 & -1 \\ 0 & -1 & -1 \\ 1 & 0 & 0 \end{pmatrix}$$

.73

$$A = \begin{pmatrix} -4 & -4 & 3 \\ 5 & 5 & -4 \\ 1 & 1 & -1 \end{pmatrix}$$

.74

$$A = \begin{pmatrix} 0 & 0 & 0 \\ -6 & -6 & -9 \\ 4 & 4 & 6 \end{pmatrix}$$

.75

$$A = \begin{pmatrix} 3 & 2 & -3 \\ -18 & -12 & 18 \\ -9 & -6 & 9 \end{pmatrix}$$

.76

$$A = \begin{pmatrix} -2 & -1 & -2 \\ -10 & -4 & -8 \\ 7 & 3 & 6 \end{pmatrix}$$

.77

$$A = \begin{pmatrix} 2 & -1 & -2 \\ -4 & 2 & 4 \\ 4 & -2 & -4 \end{pmatrix}$$

.78

$$A = \begin{pmatrix} 1 & -1 & 4 \\ 1 & -1 & 3 \\ 0 & 0 & 0 \end{pmatrix}$$

.79

$$A = \begin{pmatrix} 1 & 1 & 2 \\ 5 & 5 & 10 \\ -3 & -3 & -6 \end{pmatrix}$$

.80

$$A = \begin{pmatrix} 3 & -6 & -1 \\ 1 & -2 & 0 \\ 1 & -2 & -1 \end{pmatrix}$$

.81

$$A = \begin{pmatrix} 0 & 0 & 0 \\ 4 & -2 & -4 \\ -2 & 1 & 2 \end{pmatrix}$$

.82

$$A = \begin{pmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 1 & 1 & 0 \end{pmatrix}$$

.83

$$A = \begin{pmatrix} -3 & 9 & 9 \\ -1 & 3 & 3 \\ 0 & 0 & 0 \end{pmatrix}$$

.84

$$A = \begin{pmatrix} -2 & -4 & -4 \\ -3 & -6 & -6 \\ 4 & 8 & 8 \end{pmatrix}$$

.85

$$A = \begin{pmatrix} 0 & -2 & -2 \\ 1 & 1 & -1 \\ 0 & -1 & -1 \end{pmatrix}$$

.86

$$A = \begin{pmatrix} 0 & -1 & 3 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{pmatrix}$$

.87

$$A = \begin{pmatrix} 2 & 0 & 1 \\ -10 & 0 & -5 \\ -4 & 0 & -2 \end{pmatrix}$$

.88

$$A = \begin{pmatrix} 15 & -10 & 15 \\ 18 & -12 & 18 \\ -3 & 2 & -3 \end{pmatrix}$$

.89

$$A = \begin{pmatrix} 4 & 4 & 2 \\ -6 & -6 & -3 \\ 4 & 4 & 2 \end{pmatrix}$$

.90

$$A = \begin{pmatrix} 3 & -1 & 2 \\ -2 & 0 & -1 \\ -5 & 1 & -3 \end{pmatrix}$$

.91

$$A = \begin{pmatrix} -5 & -7 & 4 \\ 5 & 7 & -4 \\ 2 & 3 & -2 \end{pmatrix}$$

.92

$$A = \begin{pmatrix} 3 & 1 & -2 \\ -4 & -1 & 3 \\ 3 & 1 & -2 \end{pmatrix}$$

.93

$$A = \begin{pmatrix} 1 & -1 & 0 \\ 1 & -1 & 1 \\ 0 & 0 & 0 \end{pmatrix}$$

.94

$$A = \begin{pmatrix} 4 & -1 & 8 \\ -6 & 1 & -11 \\ -2 & 1 & -5 \end{pmatrix}$$

.95

$$A = \begin{pmatrix} 0 & 0 & 0 \\ -3 & -1 & -1 \\ 4 & 1 & 1 \end{pmatrix}$$

.96

$$A = \begin{pmatrix} 0 & 0 & 0 \\ -3 & -2 & 1 \\ -6 & -4 & 2 \end{pmatrix}$$

.97

$$A = \begin{pmatrix} 0 & -1 & 1 \\ 0 & 2 & -2 \\ 0 & 2 & -2 \end{pmatrix}$$

.98

$$A = \begin{pmatrix} 3 & -6 & -3 \\ 1 & -2 & -1 \\ 1 & -2 & -1 \end{pmatrix}$$

.99

$$A = \begin{pmatrix} -1 & -1 & 0 \\ 1 & 1 & 0 \\ -3 & -2 & 0 \end{pmatrix}$$

.100

$$A = \begin{pmatrix} -7 & -4 & -17 \\ 17 & 10 & 45 \\ -2 & -1 & -3 \end{pmatrix}$$

.101

$$A = \begin{pmatrix} 6 & 4 & -2 \\ -3 & -2 & 1 \\ 11 & 6 & -4 \end{pmatrix}$$

.102

$$A = \begin{pmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ -2 & 1 & 0 \end{pmatrix}$$

.103

$$A = \begin{pmatrix} -1 & 0 & -1 \\ 0 & 0 & -1 \\ 1 & 0 & 1 \end{pmatrix}$$

.104

$$A = \begin{pmatrix} -1 & 1 & 2 \\ 3 & -3 & -6 \\ -2 & 2 & 4 \end{pmatrix}$$

.105

$$A = \begin{pmatrix} 6 & -3 & -9 \\ 0 & 0 & 0 \\ 4 & -2 & -6 \end{pmatrix}$$

.106

$$A = \begin{pmatrix} 9 & 9 & -6 \\ 3 & 3 & -2 \\ 18 & 18 & -12 \end{pmatrix}$$

.107

$$A = \begin{pmatrix} -2 & -1 & 0 \\ 4 & 2 & 0 \\ 5 & 2 & 0 \end{pmatrix}$$

.108

$$A = \begin{pmatrix} 0 & -1 & 1 \\ 1 & -1 & 1 \\ 1 & -1 & 1 \end{pmatrix}$$

.109

$$A = \begin{pmatrix} -6 & 9 & 9 \\ 2 & -3 & -3 \\ -6 & 9 & 9 \end{pmatrix}$$

.110

$$A = \begin{pmatrix} -3 & -5 & 2 \\ 3 & 3 & -2 \\ 0 & -3 & 0 \end{pmatrix}$$

.111

$$A = \begin{pmatrix} -4 & 4 & -2 \\ -2 & 2 & -1 \\ 4 & -4 & 2 \end{pmatrix}$$

.112

$$A = \begin{pmatrix} -2 & -3 & 4 \\ 0 & 0 & 0 \\ -1 & -2 & 2 \end{pmatrix}$$

.113

$$A = \begin{pmatrix} 1 & 1 & 2 \\ 1 & 1 & 2 \\ -1 & -1 & -2 \end{pmatrix}$$

.114

$$A = \begin{pmatrix} 0 & -2 & 1 \\ -1 & 2 & -1 \\ -2 & 4 & -2 \end{pmatrix}$$

.115

$$A = \begin{pmatrix} -1 & -1 & 0 \\ 1 & 1 & 0 \\ -1 & -1 & 0 \end{pmatrix}$$

.116

$$A = \begin{pmatrix} 0 & 0 & -1 \\ -1 & 0 & 1 \\ 0 & 0 & 0 \end{pmatrix}$$

.117

$$A = \begin{pmatrix} 0 & 0 & 0 \\ 1 & 0 & 0 \\ -1 & 0 & 0 \end{pmatrix}$$

.118

$$A = \begin{pmatrix} 0 & 0 & 0 \\ 3 & 1 & 1 \\ -3 & -1 & -1 \end{pmatrix}$$

.119

$$A = \begin{pmatrix} -16 & 8 & -15 \\ -28 & 14 & -26 \\ 2 & -1 & 2 \end{pmatrix}$$

.120

$$A = \begin{pmatrix} 8 & 12 & 4 \\ -2 & -3 & -1 \\ -10 & -15 & -5 \end{pmatrix}$$

.121

$$A = \begin{pmatrix} 63 & -33 & -101 & -63 \\ 45 & -24 & -71 & -45 \\ 17 & -9 & -27 & -17 \\ 12 & -6 & -20 & -12 \end{pmatrix}$$

.122

$$A = \begin{pmatrix} 0 & 0 & 0 & 0 \\ -2 & 3 & -3 & -3 \\ 0 & 0 & 0 & 0 \\ -2 & 3 & -3 & -3 \end{pmatrix}$$

.123

$$A = \begin{pmatrix} 12 & -10 & -58 & 26 \\ -3 & 3 & 13 & -5 \\ 6 & -5 & -29 & 13 \\ 7 & -7 & -33 & 14 \end{pmatrix}$$

.124

$$A = \begin{pmatrix} -4 & 6 & -4 & -6 \\ -4 & 6 & -4 & -6 \\ -2 & 3 & -2 & -3 \\ 0 & 0 & 0 & 0 \end{pmatrix}$$

.125

$$A = \begin{pmatrix} -18 & 33 & 5 & 24 \\ -12 & 24 & 2 & 18 \\ -10 & 18 & 3 & 13 \\ 6 & -12 & -1 & -9 \end{pmatrix}$$

.126

$$A = \begin{pmatrix} -6 & -3 & 0 & 9 \\ 6 & 3 & 0 & -9 \\ 0 & 0 & 0 & 0 \\ -2 & -1 & 0 & 3 \end{pmatrix}$$

.127

$$A = \begin{pmatrix} -10 & 15 & -46 & 6 \\ 2 & -6 & 16 & 0 \\ 2 & -4 & 11 & -1 \\ -7 & 8 & -27 & 5 \end{pmatrix}$$

.128

$$A = \begin{pmatrix} -5 & -11 & 10 & -18 \\ -1 & -3 & 2 & -4 \\ 0 & 2 & 0 & 1 \\ 2 & 6 & -4 & 8 \end{pmatrix}$$

.129

$$A = \begin{pmatrix} 1 & 3 & 2 & -3 \\ 0 & 0 & 0 & 0 \\ -5 & -15 & -10 & 15 \\ -3 & -9 & -6 & 9 \end{pmatrix}$$

.130

$$A = \begin{pmatrix} 8 & 19 & -15 & -19 \\ 30 & 70 & -56 & -70 \\ 6 & 13 & -11 & -13 \\ 29 & 67 & -54 & -67 \end{pmatrix}$$

.131

$$A = \begin{pmatrix} -4 & 8 & -8 & -5 \\ 10 & -17 & 19 & 11 \\ 0 & 2 & -1 & -1 \\ 22 & -33 & 40 & 22 \end{pmatrix}$$

.132

$$A = \begin{pmatrix} -2 & -1 & 0 & -2 \\ 4 & 2 & 0 & 4 \\ -2 & -1 & 0 & -2 \\ 0 & 0 & 0 & 0 \end{pmatrix}$$

.133

$$A = \begin{pmatrix} 6 & 6 & 3 & 5 \\ 6 & 6 & 3 & 5 \\ 60 & 57 & 27 & 46 \\ -50 & -48 & -23 & -39 \end{pmatrix}$$

.134

$$A = \begin{pmatrix} -17 & 1 & -13 & -33 \\ -7 & 3 & -6 & -22 \\ 33 & -5 & 26 & 74 \\ -5 & 1 & -4 & -12 \end{pmatrix}$$

.135

$$A = \begin{pmatrix} 4 & -6 & -1 & 7 \\ 13 & -22 & -7 & 24 \\ -6 & 10 & 3 & -11 \\ 8 & -14 & -5 & 15 \end{pmatrix}$$

.136

$$A = \begin{pmatrix} 0 & 0 & 0 & 1 \\ 2 & 1 & 0 & -3 \\ 0 & 0 & 0 & -1 \\ 2 & 1 & 0 & -1 \end{pmatrix}$$

.137

$$A = \begin{pmatrix} 14 & -16 & -9 & -1 \\ 3 & -3 & -2 & 0 \\ 17 & -19 & -11 & -1 \\ 0 & 0 & 0 & 0 \end{pmatrix}$$

.138

$$A = \begin{pmatrix} 26 & -15 & -26 & 40 \\ 21 & -12 & -21 & 33 \\ 10 & -6 & -10 & 14 \\ -2 & 1 & 2 & -4 \end{pmatrix}$$

.139

$$A = \begin{pmatrix} 6 & 11 & 0 & 14 \\ -5 & -9 & 0 & -11 \\ -10 & -18 & 0 & -22 \\ 1 & 2 & 0 & 3 \end{pmatrix}$$

.140

$$A = \begin{pmatrix} 2 & 3 & -1 & 1 \\ -9 & -12 & 4 & -3 \\ -21 & -28 & 9 & -10 \\ 2 & 3 & -1 & 1 \end{pmatrix}$$

.141

$$A = \begin{pmatrix} 1 & 0 & -1 & -1 \\ 1 & 0 & -1 & -1 \\ 0 & 0 & 0 & 0 \\ 1 & 0 & -1 & -1 \end{pmatrix}$$

.142

$$A = \begin{pmatrix} 0 & 0 & 0 & 0 \\ -2 & 3 & 2 & 1 \\ 6 & -9 & -6 & -3 \\ -6 & 9 & 6 & 3 \end{pmatrix}$$

.143

$$A = \begin{pmatrix} -3 & 10 & -8 & 11 \\ 3 & -9 & 7 & -10 \\ -4 & 15 & -13 & 17 \\ -6 & 22 & -19 & 25 \end{pmatrix}$$

.144

$$A = \begin{pmatrix} -2 & -1 & 1 & -2 \\ 1 & 2 & 0 & 1 \\ -2 & -4 & 0 & -2 \\ 0 & -3 & -1 & 0 \end{pmatrix}$$

.145

$$A = \begin{pmatrix} -15 & 115 & -55 & -75 \\ 12 & -95 & 45 & 62 \\ 15 & -112 & 54 & 73 \\ 12 & -86 & 42 & 56 \end{pmatrix}$$

.146

$$A = \begin{pmatrix} -2 & 1 & 0 & 0 \\ -4 & 2 & 0 & 0 \\ -2 & 1 & 0 & 0 \\ 6 & -3 & 0 & 0 \end{pmatrix}$$

.147

$$A = \begin{pmatrix} 5 & -5 & -1 & 9 \\ 0 & 0 & 4 & -1 \\ -1 & 1 & 1 & -2 \\ -3 & 3 & 3 & -6 \end{pmatrix}$$

.148

$$A = \begin{pmatrix} 5 & -10 & -13 & 11 \\ -11 & 22 & 28 & -23 \\ 17 & -34 & -43 & 35 \\ 8 & -16 & -20 & 16 \end{pmatrix}$$

.149

$$A = \begin{pmatrix} 2 & 0 & -2 & 6 \\ 0 & 0 & 0 & 0 \\ -1 & 0 & 1 & -3 \\ -1 & 0 & 1 & -3 \end{pmatrix}$$

.150

$$A = \begin{pmatrix} 0 & -1 & 3 & 1 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \end{pmatrix}$$

.151

$$A = \begin{pmatrix} -2 & 0 & 4 & 6 \\ -4 & 0 & 8 & 12 \\ 5 & 0 & -10 & -15 \\ -4 & 0 & 8 & 12 \end{pmatrix}$$

.152

$$A = \begin{pmatrix} -7 & -8 & -12 & 5 \\ -9 & -10 & -15 & 7 \\ 9 & 10 & 15 & -7 \\ -2 & -2 & -3 & 2 \end{pmatrix}$$

.153

$$A = \begin{pmatrix} 2 & 1 & 0 & 4 \\ -3 & -1 & 1 & -6 \\ 1 & 0 & -1 & 2 \\ 0 & 0 & 0 & 0 \end{pmatrix}$$

.154

$$A = \begin{pmatrix} -12 & -24 & 0 & -1 \\ 6 & 12 & 1 & 1 \\ -1 & -2 & 0 & 0 \\ 2 & 4 & 0 & 0 \end{pmatrix}$$

.155

$$A = \begin{pmatrix} -1 & 5 & -4 & 3 \\ -1 & 8 & -6 & 5 \\ 0 & 0 & 0 & 0 \\ 1 & -11 & 8 & -7 \end{pmatrix}$$

.156

$$A = \begin{pmatrix} 2 & -4 & 0 & -4 \\ 6 & -11 & 1 & -11 \\ -3 & 7 & 0 & 7 \\ -5 & 9 & -1 & 9 \end{pmatrix}$$

.157

$$A = \begin{pmatrix} 0 & -1 & 8 & -1 \\ 2 & -4 & 21 & -5 \\ 1 & -1 & 1 & -2 \\ -2 & 2 & -5 & 3 \end{pmatrix}$$

.158

$$A = \begin{pmatrix} -6 & 6 & -12 & 2 \\ -3 & 3 & -6 & 1 \\ 3 & -3 & 6 & -1 \\ 10 & -9 & 20 & -3 \end{pmatrix}$$

.159

$$A = \begin{pmatrix} -40 & -12 & 22 & -40 \\ 9 & 3 & -5 & 9 \\ 58 & 18 & -32 & 58 \\ 69 & 21 & -38 & 69 \end{pmatrix}$$

.160

$$A = \begin{pmatrix} 6 & -1 & -4 & -4 \\ -60 & 10 & 40 & 40 \\ -58 & 9 & 37 & 37 \\ 82 & -13 & -53 & -53 \end{pmatrix}$$

.161

$$A = \begin{pmatrix} 0 & -8 & -3 & 13 \\ 0 & -10 & -4 & 16 \\ 0 & 5 & 2 & -8 \\ 0 & -5 & -2 & 8 \end{pmatrix}$$

.162

$$A = \begin{pmatrix} -2 & -1 & 4 & -1 \\ -6 & -3 & 12 & -3 \\ -4 & -2 & 8 & -2 \\ -3 & -2 & 9 & -3 \end{pmatrix}$$

.163

$$A = \begin{pmatrix} -38 & 38 & -33 & 20 \\ -13 & 13 & -12 & 7 \\ -17 & 17 & -15 & 9 \\ -76 & 76 & -66 & 40 \end{pmatrix}$$

.164

$$A = \begin{pmatrix} 10 & 7 & -28 & -12 \\ 4 & 4 & -12 & -4 \\ 5 & 5 & -15 & -5 \\ -1 & -1 & 3 & 1 \end{pmatrix}$$

.165

$$A = \begin{pmatrix} 0 & -1 & -3 & -7 \\ -1 & 3 & 8 & 18 \\ 3 & -7 & -21 & -48 \\ -1 & 3 & 8 & 18 \end{pmatrix}$$

.166

$$A = \begin{pmatrix} 0 & -12 & -4 & -4 \\ 0 & 3 & 1 & 1 \\ 0 & 48 & 16 & 16 \\ 0 & -57 & -19 & -19 \end{pmatrix}$$

.167

$$A = \begin{pmatrix} -3 & -3 & 1 & 4 \\ -11 & -15 & 7 & 18 \\ -4 & -6 & 3 & 7 \\ -10 & -12 & 5 & 15 \end{pmatrix}$$

.168

$$A = \begin{pmatrix} 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & -1 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \end{pmatrix}$$

.169

$$A = \begin{pmatrix} -2 & -3 & -3 & -2 \\ 3 & 6 & 6 & 4 \\ 9 & 18 & 18 & 12 \\ -16 & -33 & -33 & -22 \end{pmatrix}$$

.170

$$A = \begin{pmatrix} 3 & 1 & -1 & 1 \\ 17 & 10 & -7 & -3 \\ 28 & 17 & -12 & -4 \\ 4 & 3 & -2 & -1 \end{pmatrix}$$

.171

$$A = \begin{pmatrix} 9 & 21 & -12 & 6 \\ -7 & -13 & 10 & -2 \\ -1 & 1 & 2 & 2 \\ 9 & 16 & -13 & 2 \end{pmatrix}$$

.172

$$A = \begin{pmatrix} -2 & -4 & -3 & -5 \\ 2 & 5 & 4 & 7 \\ 2 & 1 & 0 & -1 \\ -2 & -3 & -2 & -3 \end{pmatrix}$$

.173

$$A = \begin{pmatrix} 0 & 3 & 0 & 2 \\ -2 & 2 & -1 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & -4 & 0 & -2 \end{pmatrix}$$

.174

$$A = \begin{pmatrix} -6 & 2 & -6 & -6 \\ 9 & -3 & 9 & 9 \\ 0 & 0 & 0 & 0 \\ 9 & -3 & 9 & 9 \end{pmatrix}$$

.175

$$A = \begin{pmatrix} 2 & 1 & 1 & -2 \\ 2 & 1 & -1 & 6 \\ -9 & -4 & -1 & -4 \\ -2 & -1 & 0 & -2 \end{pmatrix}$$

.176

$$A = \begin{pmatrix} 10 & 0 & -10 & -15 \\ 10 & 0 & -10 & -15 \\ -2 & 0 & 2 & 3 \\ 8 & 0 & -8 & -12 \end{pmatrix}$$

.177

$$A = \begin{pmatrix} 4 & 1 & -1 & -2 \\ -6 & -2 & 1 & 2 \\ 0 & 0 & 0 & 0 \\ 4 & 1 & -1 & -2 \end{pmatrix}$$

.178

$$A = \begin{pmatrix} 5 & -3 & -8 & 14 \\ 8 & -3 & -17 & 24 \\ 4 & -1 & -10 & 13 \\ 3 & -1 & -6 & 8 \end{pmatrix}$$

.179

$$A = \begin{pmatrix} -20 & 21 & 6 & 25 \\ -9 & 9 & 3 & 12 \\ 22 & -24 & -6 & -26 \\ -14 & 15 & 4 & 17 \end{pmatrix}$$

.180

$$A = \begin{pmatrix} 0 & -2 & 0 & -1 \\ 0 & 1 & -1 & 0 \\ 0 & 1 & -1 & 0 \\ 0 & -2 & 2 & 0 \end{pmatrix}$$

.181

$$A = \begin{pmatrix} 8 & 4 & 2 & 2 \\ 1 & 1 & 3 & 1 \\ 12 & 6 & 3 & 3 \\ -45 & -23 & -14 & -12 \end{pmatrix}$$

.182

$$A = \begin{pmatrix} -8 & -10 & -16 & 19 \\ 3 & 4 & 6 & -7 \\ -5 & -6 & -10 & 12 \\ -6 & -8 & -12 & 14 \end{pmatrix}$$

.183

$$A = \begin{pmatrix} 1 & -1 & -2 & 0 \\ -5 & 5 & 10 & 0 \\ 3 & -3 & -6 & 0 \\ -3 & 3 & 6 & 0 \end{pmatrix}$$

.184

$$A = \begin{pmatrix} 3 & 3 & 1 & 12 \\ -8 & -7 & 0 & -25 \\ 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 4 \end{pmatrix}$$

.185

$$A = \begin{pmatrix} 3 & -1 & -2 & -2 \\ 15 & -4 & -9 & -11 \\ -9 & 2 & 5 & 7 \\ 6 & -2 & -4 & -4 \end{pmatrix}$$

.186

$$A = \begin{pmatrix} -2 & 0 & -2 & 3 \\ 0 & 0 & 0 & 0 \\ -4 & 0 & -5 & 7 \\ -4 & 0 & -5 & 7 \end{pmatrix}$$

.187

$$A = \begin{pmatrix} 3 & -1 & -1 & 2 \\ -3 & 1 & 1 & -2 \\ 0 & 0 & 0 & 0 \\ -6 & 2 & 2 & -4 \end{pmatrix}$$

.188

$$A = \begin{pmatrix} -2 & -1 & -3 & 0 \\ -1 & -1 & -2 & 1 \\ 2 & 1 & 3 & 0 \\ 0 & 0 & 0 & 0 \end{pmatrix}$$

.189

$$A = \begin{pmatrix} 3 & 5 & 6 & 1 \\ 1 & 2 & 2 & 0 \\ -2 & -4 & -4 & 0 \\ 0 & 1 & 0 & -1 \end{pmatrix}$$

.190

$$A = \begin{pmatrix} -1 & -7 & 0 & 6 \\ -2 & -17 & -1 & 14 \\ 1 & 7 & 0 & -6 \\ -3 & -22 & -2 & 18 \end{pmatrix}$$

.191

$$A = \begin{pmatrix} -15 & -3 & -1 & -5 \\ 106 & 22 & 10 & 34 \\ -34 & -7 & -3 & -11 \\ -11 & -2 & 0 & -4 \end{pmatrix}$$

.192

$$A = \begin{pmatrix} -84 & -41 & 82 & -30 \\ 90 & 44 & -88 & 32 \\ -18 & -9 & 18 & -6 \\ 63 & 31 & -62 & 22 \end{pmatrix}$$

.193

$$A = \begin{pmatrix} -3 & 0 & -21 & -9 \\ -6 & -6 & -17 & -13 \\ -3 & -3 & -10 & -7 \\ 8 & 6 & 31 & 19 \end{pmatrix}$$

.194

$$A = \begin{pmatrix} -8 & 6 & -9 & 8 \\ -1 & 1 & -1 & 1 \\ 2 & -2 & 2 & -2 \\ -5 & 3 & -6 & 5 \end{pmatrix}$$

.195

$$A = \begin{pmatrix} -3 & 1 & 2 & 3 \\ -11 & 1 & 10 & 7 \\ -5 & 1 & 4 & 4 \\ 4 & 0 & -4 & -2 \end{pmatrix}$$

.196

$$A = \begin{pmatrix} -2 & 0 & -1 & -3 \\ 0 & 0 & 1 & -2 \\ 1 & 0 & 1 & 1 \\ 1 & 0 & 1 & 1 \end{pmatrix}$$

.197

$$A = \begin{pmatrix} -31 & -28 & 18 & 3 \\ 50 & 44 & -28 & -6 \\ 28 & 25 & -16 & -3 \\ -25 & -22 & 14 & 3 \end{pmatrix}$$

.198

$$A = \begin{pmatrix} 1 & 0 & 1 & -1 \\ 0 & 0 & 0 & 0 \\ -1 & 0 & -1 & 1 \\ 0 & 0 & 0 & 0 \end{pmatrix}$$

.199

$$A = \begin{pmatrix} 8 & 0 & -8 & -12 \\ 4 & 0 & -4 & -6 \\ 2 & 0 & -2 & -3 \\ 4 & 0 & -4 & -6 \end{pmatrix}$$

.200

$$A = \begin{pmatrix} -8 & -1 & 5 & 4 \\ -37 & -5 & 24 & 19 \\ -5 & -1 & 4 & 3 \\ -19 & -2 & 11 & 9 \end{pmatrix}$$

.201

$$A = \begin{pmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \end{pmatrix}$$

.202

$$A = \begin{pmatrix} -2 & -1 & -1 & 0 \\ -6 & -2 & 4 & 4 \\ 8 & 3 & 0 & -2 \\ -13 & -5 & 1 & 4 \end{pmatrix}$$

.203

$$A = \begin{pmatrix} 6 & -2 & -4 & 0 \\ 3 & -3 & -2 & -1 \\ 6 & 0 & -4 & 1 \\ -3 & 3 & 2 & 1 \end{pmatrix}$$

.204

$$A = \begin{pmatrix} 33 & -40 & -27 & -26 \\ 5 & -7 & -5 & -4 \\ -9 & 11 & 7 & 7 \\ 42 & -51 & -34 & -33 \end{pmatrix}$$

.205

$$A = \begin{pmatrix} 36 & -45 & 36 & 48 \\ 42 & -51 & 39 & 55 \\ 22 & -27 & 21 & 29 \\ -4 & 6 & -6 & -6 \end{pmatrix}$$

.206

$$A = \begin{pmatrix} 1 & 1 & 2 & -1 \\ 2 & 2 & 4 & -2 \\ -1 & -1 & -2 & 1 \\ 1 & 0 & 0 & -1 \end{pmatrix}$$

.207

$$A = \begin{pmatrix} 0 & 21 & -10 & 9 \\ 0 & -2 & 1 & -1 \\ 0 & -6 & 3 & -3 \\ 0 & -2 & 1 & -1 \end{pmatrix}$$

.208

$$A = \begin{pmatrix} 121 & 53 & -46 & -109 \\ -58 & -26 & 22 & 52 \\ -155 & -67 & 59 & 140 \\ 171 & 75 & -65 & -154 \end{pmatrix}$$

.209

$$A = \begin{pmatrix} 0 & 0 & 24 & -16 \\ 0 & 0 & -30 & 20 \\ 0 & 0 & 6 & -4 \\ 0 & 0 & 9 & -6 \end{pmatrix}$$

.210

$$A = \begin{pmatrix} 12 & 10 & 44 & 5 \\ 6 & 7 & 23 & 3 \\ -3 & -1 & -9 & -1 \\ -24 & -18 & -82 & -10 \end{pmatrix}$$

.211

$$A = \begin{pmatrix} -2 & 2 & 4 & 4 \\ -4 & 4 & 8 & 8 \\ 1 & -1 & -2 & -2 \\ 0 & 0 & 0 & 0 \end{pmatrix}$$

.212

$$A = \begin{pmatrix} 12 & -4 & 0 & -12 \\ -9 & 3 & 0 & 9 \\ -15 & 5 & 0 & 15 \\ 15 & -5 & 0 & -15 \end{pmatrix}$$

.213

$$A = \begin{pmatrix} -24 & -46 & 29 & -36 \\ -2 & -3 & 2 & -3 \\ -2 & -5 & 3 & -3 \\ 16 & 30 & -19 & 24 \end{pmatrix}$$

.214

$$A = \begin{pmatrix} 2 & 0 & -4 & 4 \\ -21 & 0 & 49 & -51 \\ 5 & 0 & -10 & 10 \\ 4 & 0 & -8 & 8 \end{pmatrix}$$

.215

$$A = \begin{pmatrix} 18 & -12 & 18 & -18 \\ -27 & 18 & -27 & 27 \\ -6 & 4 & -6 & 6 \\ 30 & -20 & 30 & -30 \end{pmatrix}$$

.216

$$A = \begin{pmatrix} -2 & -4 & 6 & -11 \\ 2 & 4 & -6 & 11 \\ 2 & 5 & -8 & 14 \\ 0 & 2 & -4 & 6 \end{pmatrix}$$

.217

$$A = \begin{pmatrix} 96 & 96 & -64 & 32 \\ -33 & -33 & 22 & -11 \\ 87 & 87 & -58 & 29 \\ -15 & -15 & 10 & -5 \end{pmatrix}$$

.218

$$A = \begin{pmatrix} -6 & -6 & 0 & 4 \\ 6 & 6 & 0 & -4 \\ 3 & 3 & 0 & -2 \\ 0 & 0 & 0 & 0 \end{pmatrix}$$

.219

$$A = \begin{pmatrix} 0 & 0 & 0 & 0 \\ 1 & 2 & -2 & 1 \\ 0 & 0 & 0 & 0 \\ -2 & -4 & 4 & -2 \end{pmatrix}$$

.220

$$A = \begin{pmatrix} 1 & -1 & -1 & 0 \\ 6 & 3 & 6 & 9 \\ -5 & -4 & -7 & -9 \\ 1 & 2 & 3 & 3 \end{pmatrix}$$

.221

$$A = \begin{pmatrix} -4 & 4 & 12 & -10 & 8 \\ 9 & -6 & -26 & 20 & -16 \\ 7 & -4 & -20 & 15 & -12 \\ 5 & -3 & -15 & 11 & -9 \\ -11 & 7 & 31 & -24 & 19 \end{pmatrix}$$

.222

$$A = \begin{pmatrix} 8 & -17 & -11 & 13 & 10 \\ -12 & 28 & 19 & -21 & -16 \\ -2 & 4 & 2 & -3 & -2 \\ -23 & 55 & 37 & -41 & -31 \\ 1 & -6 & -5 & 4 & 3 \end{pmatrix}$$

.223

$$A = \begin{pmatrix} 6 & 0 & 16 & 14 & -2 \\ 34 & 0 & 93 & 77 & -9 \\ -13 & 0 & -36 & -29 & 3 \\ 17 & 0 & 47 & 38 & -4 \\ 31 & 0 & 85 & 70 & -8 \end{pmatrix}$$

.224

$$A = \begin{pmatrix} 0 & -4 & -2 & 16 & 4 \\ -1 & -5 & -2 & 18 & 5 \\ 1 & -5 & -3 & 22 & 5 \\ 1 & 1 & 0 & -2 & -1 \\ 0 & -10 & -5 & 40 & 10 \end{pmatrix}$$

.225

$$A = \begin{pmatrix} 2 & 21 & -3 & -12 & -7 \\ 1 & 13 & -2 & -7 & -4 \\ 7 & 40 & -5 & -21 & -15 \\ -3 & -11 & 1 & 6 & 5 \\ 6 & 45 & -6 & -25 & -16 \end{pmatrix}$$

.226

$$A = \begin{pmatrix} 42 & 62 & 24 & -36 & 0 \\ -32 & -48 & -18 & 28 & 0 \\ -31 & -45 & -18 & 26 & 0 \\ -27 & -41 & -15 & 24 & 0 \\ 6 & 10 & 3 & -6 & 0 \end{pmatrix}$$

.227

$$A = \begin{pmatrix} -4 & -8 & 0 & 4 & 0 \\ 1 & 2 & 0 & -1 & 0 \\ 5 & 13 & -2 & -8 & 2 \\ -2 & -4 & 0 & 2 & 0 \\ 1 & 5 & -2 & -4 & 2 \end{pmatrix}$$

.228

$$A = \begin{pmatrix} 106 & 40 & -6 & 46 & -69 \\ -42 & -16 & 2 & -18 & 27 \\ -116 & -44 & 6 & -50 & 75 \\ -111 & -42 & 6 & -48 & 72 \\ 74 & 28 & -4 & 32 & -48 \end{pmatrix}$$

.229

$$A = \begin{pmatrix} -75 & 9 & 32 & -1 & -28 \\ -161 & 20 & 68 & -3 & -59 \\ -62 & 8 & 26 & -2 & -22 \\ 24 & -3 & -10 & 0 & 9 \\ 79 & -10 & -33 & 1 & 29 \end{pmatrix}$$

.230

$$A = \begin{pmatrix} 1 & 9 & 6 & 8 & 3 \\ 11 & 37 & 24 & 35 & 14 \\ -9 & -19 & -12 & -19 & -8 \\ -3 & -21 & -14 & -19 & -7 \\ -5 & -20 & -13 & -19 & -7 \end{pmatrix}$$

.231

$$A = \begin{pmatrix} 0 & -111 & 74 & 37 & 111 \\ 0 & 21 & -14 & -7 & -21 \\ 0 & 117 & -78 & -39 & -117 \\ 0 & 108 & -72 & -36 & -108 \\ 0 & -93 & 62 & 31 & 93 \end{pmatrix}$$

.232

$$A = \begin{pmatrix} 14 & 1 & 24 & 28 & 7 \\ 13 & -5 & 19 & 31 & 13 \\ 3 & 1 & 6 & 6 & 1 \\ -16 & 1 & -27 & -35 & -11 \\ 26 & -4 & 42 & 58 & 20 \end{pmatrix}$$

.233

$$A = \begin{pmatrix} 3 & -9 & -6 & 5 & -6 \\ 1 & -9 & -9 & 6 & -8 \\ -6 & 12 & 6 & -6 & 7 \\ 0 & -18 & -18 & 12 & -15 \\ 6 & -18 & -12 & 10 & -12 \end{pmatrix}$$

.234

$$A = \begin{pmatrix} 13 & -7 & 14 & 2 & 2 \\ 58 & -40 & 70 & 1 & 4 \\ 20 & -14 & 24 & -1 & 0 \\ -101 & 64 & -117 & -5 & -8 \\ 87 & -56 & 102 & 5 & 8 \end{pmatrix}$$

.235

$$A = \begin{pmatrix} 36 & 6 & 6 & -33 & 12 \\ -54 & -12 & -9 & 51 & -17 \\ -94 & -19 & -16 & 88 & -30 \\ -30 & -8 & -5 & 29 & -9 \\ -116 & -25 & -19 & 109 & -37 \end{pmatrix}$$

.236

$$A = \begin{pmatrix} -3 & 9 & 9 & 0 & -9 \\ -2 & 6 & 6 & 0 & -6 \\ 0 & 3 & 4 & 1 & -5 \\ 1 & 0 & 1 & 1 & -2 \\ -1 & 6 & 7 & 1 & -8 \end{pmatrix}$$

.237

$$A = \begin{pmatrix} 5 & -5 & -11 & -3 & -7 \\ 12 & -13 & -26 & -9 & -18 \\ -25 & 25 & 47 & 19 & 35 \\ -47 & 48 & 93 & 35 & 67 \\ 52 & -53 & -102 & -39 & -74 \end{pmatrix}$$

.238

$$A = \begin{pmatrix} -4 & 1 & 0 & 2 & -2 \\ -6 & 3 & 1 & 3 & -3 \\ 8 & -5 & -2 & -4 & 4 \\ -3 & 3 & 1 & 1 & -2 \\ 6 & 3 & 2 & -4 & 2 \end{pmatrix}$$

.239

$$A = \begin{pmatrix} 39 & 29 & -32 & 30 & 45 \\ 8 & 9 & -6 & 5 & 11 \\ -14 & -13 & 10 & -10 & -17 \\ -29 & -22 & 24 & -22 & -34 \\ -30 & -26 & 23 & -22 & -36 \end{pmatrix}$$

.240

$$A = \begin{pmatrix} 156 & 27 & 2 & -39 & 121 \\ -76 & -13 & -1 & 19 & -59 \\ -84 & -15 & -1 & 21 & -65 \\ -10 & 0 & 1 & 3 & -9 \\ -186 & -32 & -1 & 47 & -145 \end{pmatrix}$$

.241

$$A = \begin{pmatrix} 16 & 4 & -56 & -32 & 20 \\ 6 & 1 & -22 & -12 & 7 \\ -1 & 0 & 4 & 2 & -1 \\ 8 & 2 & -28 & -16 & 10 \\ -4 & -1 & 14 & 8 & -5 \end{pmatrix}$$

.242

$$A = \begin{pmatrix} 8 & 46 & 7 & -34 & 33 \\ 8 & 63 & 10 & -44 & 45 \\ -1 & 3 & 1 & -1 & 2 \\ 10 & 50 & 7 & -38 & 36 \\ -3 & -48 & -9 & 31 & -34 \end{pmatrix}$$

.243

$$A = \begin{pmatrix} 40 & 65 & -20 & 65 & 90 \\ -36 & -56 & 18 & -58 & -78 \\ 34 & 54 & -17 & 55 & 75 \\ -26 & -41 & 13 & -42 & -57 \\ 34 & 54 & -17 & 55 & 75 \end{pmatrix}$$

.244

$$A = \begin{pmatrix} -34 & 11 & -13 & 27 & 36 \\ 24 & -10 & 8 & -16 & -24 \\ 73 & -28 & 25 & -50 & -73 \\ 79 & -30 & 28 & -56 & -80 \\ -73 & 27 & -27 & 54 & 75 \end{pmatrix}$$

.245

$$A = \begin{pmatrix} -63 & -38 & 14 & -24 & 39 \\ 98 & 59 & -21 & 38 & -60 \\ -181 & -109 & 39 & -70 & 111 \\ 106 & 64 & -24 & 40 & -66 \\ 123 & 74 & -26 & 48 & -75 \end{pmatrix}$$

.246

$$A = \begin{pmatrix} 4 & -27 & -23 & -8 & 13 \\ 3 & -13 & -11 & -4 & 5 \\ 1 & -17 & -15 & -5 & 10 \\ -6 & 34 & 30 & 11 & -15 \\ 5 & -29 & -25 & -9 & 13 \end{pmatrix}$$

.247

$$A = \begin{pmatrix} 6 & -2 & -11 & -43 & -13 \\ 12 & -4 & -36 & -128 & -40 \\ -3 & 1 & -3 & -4 & -2 \\ 0 & 0 & -1 & -3 & -1 \\ 0 & 0 & 4 & 12 & 4 \end{pmatrix}$$

.248

$$A = \begin{pmatrix} 13 & 8 & 12 & 13 & 15 \\ -28 & -8 & -87 & -43 & -60 \\ -6 & 0 & -30 & -12 & -18 \\ 14 & 0 & 70 & 28 & 42 \\ -3 & -2 & 0 & -2 & -3 \end{pmatrix}$$

.249

$$A = \begin{pmatrix} -1 & 3 & 0 & -2 & 0 \\ -1 & -1 & 0 & 0 & -2 \\ -1 & -15 & 0 & 7 & -8 \\ -1 & -3 & 0 & 1 & -3 \\ 1 & -1 & 0 & 1 & 1 \end{pmatrix}$$

.250

$$A = \begin{pmatrix} -8 & -12 & 7 & -6 & 5 \\ 4 & 6 & -6 & 2 & -4 \\ 0 & 0 & 0 & 0 & 0 \\ 2 & 3 & 2 & 3 & 1 \\ -2 & -3 & -2 & -3 & -1 \end{pmatrix}$$

.251

$$A = \begin{pmatrix} 10 & 17 & 10 & -6 & -5 \\ -27 & -44 & -26 & 15 & 13 \\ 34 & 56 & 32 & -19 & -15 \\ -25 & -41 & -25 & 14 & 13 \\ 27 & 46 & 26 & -16 & -12 \end{pmatrix}$$

.252

$$A = \begin{pmatrix} -8 & -2 & -4 & -4 & -8 \\ 7 & 1 & 1 & 2 & 5 \\ -15 & -3 & -5 & -6 & -13 \\ 11 & 2 & 3 & 4 & 9 \\ 8 & 2 & 4 & 4 & 8 \end{pmatrix}$$

.253

$$A = \begin{pmatrix} -96 & 88 & -64 & -72 & 12 \\ -66 & 60 & -44 & -50 & 8 \\ 51 & -48 & 34 & 37 & -7 \\ 18 & -16 & 12 & 14 & -2 \\ 93 & -86 & 62 & 69 & -12 \end{pmatrix}$$

.254

$$A = \begin{pmatrix} 35 & -15 & -45 & 25 & 50 \\ -21 & 9 & 27 & -15 & -30 \\ 44 & -18 & -56 & 31 & 62 \\ 4 & 0 & -4 & 2 & 4 \\ 7 & -3 & -9 & 5 & 10 \end{pmatrix}$$

.255

$$A = \begin{pmatrix} 7 & 11 & -1 & -3 & -12 \\ -6 & -8 & -2 & 4 & 6 \\ 7 & 10 & 1 & -4 & -9 \\ 8 & 13 & -2 & -3 & -15 \\ -4 & -5 & -2 & 3 & 3 \end{pmatrix}$$

.256

$$A = \begin{pmatrix} -5 & 2 & 3 & 1 & 5 \\ -11 & 5 & 8 & 1 & 11 \\ -3 & 1 & 2 & 1 & 3 \\ -4 & 2 & 3 & 0 & 4 \\ 2 & -1 & -2 & 0 & -2 \end{pmatrix}$$

.257

$$A = \begin{pmatrix} 9 & -3 & 6 & 9 & -6 \\ -21 & 7 & -14 & -21 & 14 \\ 3 & -1 & 2 & 3 & -2 \\ -24 & 8 & -16 & -24 & 16 \\ -9 & 3 & -6 & -9 & 6 \end{pmatrix}$$

.258

$$A = \begin{pmatrix} 24 & 1 & 18 & -12 & 21 \\ 7 & 0 & 5 & -3 & 6 \\ -9 & -2 & -6 & 6 & -9 \\ -6 & 0 & -5 & 3 & -5 \\ -24 & -1 & -18 & 12 & -21 \end{pmatrix}$$

.259

$$A = \begin{pmatrix} -10 & 4 & -18 & -11 & 0 \\ -5 & 6 & -11 & -6 & -5 \\ -1 & 4 & -4 & -2 & -5 \\ 9 & -8 & 19 & 11 & 6 \\ -5 & 4 & -10 & -6 & -3 \end{pmatrix}$$

.260

$$A = \begin{pmatrix} 5 & 5 & -2 & -5 & -2 \\ -32 & -32 & 16 & 36 & 8 \\ -19 & -19 & 10 & 22 & 4 \\ -11 & -11 & 6 & 13 & 2 \\ -22 & -22 & 12 & 26 & 4 \end{pmatrix}$$

.261

$$A = \begin{pmatrix} 21 & -75 & 31 & -34 & 48 \\ -8 & 28 & -12 & 13 & -18 \\ -13 & 47 & -19 & 21 & -30 \\ -14 & 50 & -20 & 22 & -32 \\ -23 & 81 & -34 & 37 & -52 \end{pmatrix}$$

.262

$$A = \begin{pmatrix} 5 & -15 & 0 & 15 & 10 \\ -5 & 15 & 0 & -15 & -10 \\ -5 & 18 & 2 & -21 & -13 \\ 3 & -6 & 2 & 3 & 3 \\ -14 & 39 & -2 & -36 & -25 \end{pmatrix}$$

.263

$$A = \begin{pmatrix} 18 & 28 & -40 & -29 & -21 \\ -27 & -35 & 53 & 40 & 21 \\ -30 & -38 & 58 & 44 & 22 \\ 33 & 45 & -67 & -50 & -29 \\ -9 & -13 & 19 & 14 & 9 \end{pmatrix}$$

.264

$$A = \begin{pmatrix} 7 & -5 & 4 & 8 & 0 \\ 21 & -15 & 11 & 27 & 1 \\ 7 & -5 & 3 & 10 & 0 \\ 4 & -3 & 3 & 5 & 1 \\ -4 & 3 & -2 & -6 & 0 \end{pmatrix}$$

.265

$$A = \begin{pmatrix} -31 & 0 & -6 & 5 & 7 \\ -65 & -1 & -14 & 12 & 15 \\ 50 & 2 & 10 & -11 & -13 \\ 28 & 1 & 6 & -6 & -7 \\ -115 & -3 & -24 & 23 & 28 \end{pmatrix}$$

.266

$$A = \begin{pmatrix} -2 & 0 & -1 & 2 & -3 \\ 17 & 2 & 11 & -21 & 33 \\ 60 & 8 & 40 & -76 & 120 \\ -41 & -6 & -28 & 53 & -84 \\ -47 & -6 & -31 & 59 & -93 \end{pmatrix}$$

.267

$$A = \begin{pmatrix} -10 & -4 & -10 & 2 & 2 \\ -139 & -53 & -139 & 59 & 7 \\ 18 & 7 & 18 & -6 & -2 \\ -89 & -34 & -89 & 37 & 5 \\ -152 & -58 & -152 & 64 & 8 \end{pmatrix}$$

.268

$$A = \begin{pmatrix} 29 & -87 & 29 & 58 & 29 \\ 20 & -60 & 20 & 40 & 20 \\ 23 & -69 & 23 & 46 & 23 \\ 4 & -12 & 4 & 8 & 4 \\ 0 & 0 & 0 & 0 & 0 \end{pmatrix}$$

.269

$$A = \begin{pmatrix} 8 & -1 & -2 & -13 & -8 \\ 2 & 0 & -3 & -5 & -3 \\ -6 & -1 & 2 & 10 & 6 \\ 32 & 5 & -25 & -65 & -39 \\ -44 & -9 & 38 & 92 & 55 \end{pmatrix}$$

.270

$$A = \begin{pmatrix} 58 & -17 & 11 & 26 & 82 \\ -12 & 3 & -3 & -6 & -16 \\ -45 & 13 & -9 & -20 & -63 \\ 3 & -1 & 0 & 2 & 5 \\ -38 & 11 & -7 & -18 & -54 \end{pmatrix}$$

.271

$$A = \begin{pmatrix} -8 & 0 & -5 & 24 & 11 \\ 24 & 0 & 14 & -73 & -33 \\ 1 & 0 & 1 & -3 & -1 \\ -2 & 0 & -1 & 6 & 3 \\ -1 & 0 & -1 & 3 & 1 \end{pmatrix}$$

.272

$$A = \begin{pmatrix} -28 & 10 & 54 & -4 & -2 \\ -6 & 3 & 11 & 0 & -1 \\ -14 & 5 & 27 & -2 & -1 \\ -4 & 1 & 8 & -1 & 0 \\ -2 & 2 & 3 & 1 & -1 \end{pmatrix}$$

.273

$$A = \begin{pmatrix} -20 & 8 & 26 & -1 & 10 \\ -22 & 7 & 29 & -2 & 10 \\ -10 & 5 & 13 & 0 & 6 \\ 32 & -8 & -42 & 4 & -12 \\ 6 & -3 & -8 & 0 & -4 \end{pmatrix}$$

.274

$$A = \begin{pmatrix} 17 & -73 & -16 & -73 & -5 \\ -7 & 35 & 7 & 35 & 1 \\ 7 & -35 & -7 & -35 & -1 \\ 8 & -41 & -8 & -41 & -1 \\ 11 & -44 & -10 & -44 & -4 \end{pmatrix}$$

.275

$$A = \begin{pmatrix} -21 & 3 & 3 & 15 & -3 \\ -40 & 6 & 5 & 29 & -6 \\ -54 & 8 & 7 & 39 & -8 \\ 12 & -2 & -1 & -9 & 2 \\ 111 & -20 & -11 & -82 & 17 \end{pmatrix}$$

.276

$$A = \begin{pmatrix} -26 & -78 & -35 & -17 & -1 \\ 8 & 24 & 11 & 5 & 1 \\ -2 & -6 & -3 & -1 & -1 \\ 8 & 24 & 11 & 5 & 1 \\ 3 & 9 & 4 & 2 & 0 \end{pmatrix}$$

.277

$$A = \begin{pmatrix} 23 & -68 & -29 & 6 & -11 \\ 7 & -21 & -9 & 2 & -4 \\ 4 & -11 & -4 & 0 & -3 \\ 12 & -35 & -15 & 3 & -4 \\ -2 & 6 & 3 & -1 & -1 \end{pmatrix}$$

.278

$$A = \begin{pmatrix} 5 & -4 & -3 & -5 & -3 \\ 14 & -11 & -8 & -13 & -8 \\ 19 & -17 & -13 & -19 & -13 \\ 4 & -3 & -2 & -3 & -2 \\ -36 & 30 & 22 & 33 & 22 \end{pmatrix}$$

.279

$$A = \begin{pmatrix} -1 & 0 & -1 & 1 & 1 \\ -15 & 11 & -18 & 9 & 2 \\ -2 & 3 & -3 & 1 & -1 \\ 15 & -8 & 17 & -10 & -5 \\ -21 & 13 & -22 & 11 & 3 \end{pmatrix}$$

.280

$$A = \begin{pmatrix} 14 & 17 & 26 & 5 & -19 \\ -5 & -6 & -8 & -2 & 6 \\ 1 & 1 & -2 & 1 & 1 \\ -14 & -16 & -28 & -5 & 21 \\ 2 & 3 & 1 & 1 & -1 \end{pmatrix}$$

.281

$$A = \begin{pmatrix} 18 & 7 & -4 & -14 & -7 \\ -28 & -11 & 6 & 22 & 11 \\ 18 & 7 & -4 & -14 & -7 \\ 13 & 5 & -3 & -10 & -5 \\ -18 & -7 & 4 & 14 & 7 \end{pmatrix}$$

.282

$$A = \begin{pmatrix} 19 & -5 & -14 & 32 & -24 \\ 47 & -14 & -35 & 71 & -55 \\ -19 & 6 & 14 & -26 & 21 \\ 3 & -1 & -2 & 4 & -3 \\ 19 & -5 & -13 & 31 & -23 \end{pmatrix}$$

.283

$$A = \begin{pmatrix} -39 & 4 & -27 & 15 & 2 \\ 97 & -12 & 79 & -38 & -9 \\ 14 & -1 & 9 & -5 & 0 \\ -104 & 12 & -75 & 41 & 7 \\ 11 & -1 & 0 & -5 & 1 \end{pmatrix}$$

.284

$$A = \begin{pmatrix} 5 & -5 & 3 & -7 & -2 \\ -1 & 2 & -1 & 2 & 1 \\ -6 & -1 & -4 & 7 & 3 \\ 4 & -7 & 2 & -6 & -1 \\ -6 & 3 & -4 & 8 & 3 \end{pmatrix}$$

.285

$$A = \begin{pmatrix} 2 & -1 & -1 & -1 & 0 \\ 1 & -1 & -2 & -2 & -1 \\ 6 & -2 & -1 & 0 & 1 \\ -2 & 1 & 1 & 1 & 0 \\ -4 & 1 & 0 & -1 & -1 \end{pmatrix}$$

.286

$$A = \begin{pmatrix} 59 & -3 & 26 & -46 & 19 \\ -125 & 4 & -53 & 99 & -38 \\ -4 & 1 & -2 & 3 & -2 \\ 23 & -3 & 10 & -18 & 9 \\ -143 & 4 & -61 & 113 & -43 \end{pmatrix}$$

.287

$$A = \begin{pmatrix} -4 & 3 & 27 & 33 & -32 \\ 5 & -1 & -32 & -42 & 41 \\ -6 & 1 & 41 & 54 & -52 \\ 7 & -2 & -47 & -61 & 59 \\ 3 & -2 & -21 & -26 & 25 \end{pmatrix}$$

.288

$$A = \begin{pmatrix} 1 & 0 & -1 & 1 & 0 \\ 2 & 0 & -2 & 2 & 0 \\ -3 & 2 & 2 & -2 & 3 \\ -4 & 2 & 3 & -3 & 3 \\ -1 & 0 & 1 & -1 & 0 \end{pmatrix}$$

.289

$$A = \begin{pmatrix} -2 & 3 & -8 & 2 & -1 \\ 2 & -1 & 6 & -1 & 1 \\ -4 & 0 & -10 & 1 & -2 \\ -12 & 2 & -32 & 4 & -6 \\ 18 & -5 & 50 & -7 & 9 \end{pmatrix}$$

.290

$$A = \begin{pmatrix} -3 & 3 & 6 & 0 & 4 \\ 2 & 1 & -1 & -1 & -1 \\ 0 & 2 & 3 & -1 & 1 \\ 1 & 7 & 7 & -3 & 3 \\ -4 & -2 & 2 & 2 & 2 \end{pmatrix}$$

.291

$$A = \begin{pmatrix} 12 & 5 & 4 & -11 & -14 \\ -106 & -43 & -35 & 89 & 116 \\ 161 & 67 & 53 & -138 & -177 \\ -100 & -41 & -33 & 85 & 110 \\ 97 & 40 & 32 & -83 & -107 \end{pmatrix}$$

.292

$$A = \begin{pmatrix} 18 & 6 & 6 & 8 & -12 \\ -176 & -53 & -36 & -65 & 106 \\ 48 & 15 & 12 & 19 & -30 \\ -90 & -27 & -18 & -33 & 54 \\ -97 & -28 & -15 & -33 & 56 \end{pmatrix}$$

.293

$$A = \begin{pmatrix} -2 & -1 & 1 & 1 & 0 \\ -45 & -30 & 21 & 14 & -8 \\ 9 & 7 & -5 & -3 & 2 \\ -60 & -41 & 29 & 19 & -11 \\ 103 & 69 & -49 & -33 & 18 \end{pmatrix}$$

.294

$$A = \begin{pmatrix} 49 & 51 & 81 & 130 & 143 \\ -27 & -29 & -43 & -70 & -77 \\ -18 & -20 & -28 & -46 & -51 \\ -19 & -20 & -31 & -50 & -55 \\ 20 & 22 & 32 & 52 & 58 \end{pmatrix}$$

.295

$$A = \begin{pmatrix} -54 & 23 & -23 & -102 & -104 \\ 44 & -18 & 18 & 82 & 84 \\ 40 & -16 & 16 & 74 & 76 \\ -48 & 20 & -20 & -90 & -92 \\ 76 & -32 & 32 & 143 & 146 \end{pmatrix}$$

.296

$$A = \begin{pmatrix} -17 & 7 & -4 & -2 & 6 \\ -41 & 15 & -10 & -6 & 16 \\ -52 & 17 & -13 & -9 & 21 \\ 65 & -23 & 16 & 10 & -26 \\ -12 & 4 & -3 & -2 & 5 \end{pmatrix}$$

.297

$$A = \begin{pmatrix} 0 & -3 & 0 & -4 & 0 \\ 0 & 2 & 4 & 7 & -2 \\ 0 & 2 & 4 & 6 & -3 \\ 0 & -1 & -3 & -4 & 2 \\ 0 & 1 & 3 & 4 & -2 \end{pmatrix}$$

.298

$$A = \begin{pmatrix} 0 & 20 & -30 & 20 & -30 \\ 0 & 78 & -117 & 78 & -117 \\ 0 & 36 & -54 & 36 & -54 \\ 0 & 24 & -36 & 24 & -36 \\ 0 & 32 & -48 & 32 & -48 \end{pmatrix}$$

.299

$$A = \begin{pmatrix} -11 & -23 & -17 & 21 & 18 \\ 0 & 0 & 0 & 0 & 0 \\ -11 & -23 & -17 & 21 & 19 \\ -16 & -33 & -24 & 30 & 26 \\ 2 & 3 & 2 & -3 & -2 \end{pmatrix}$$

.300

$$A = \begin{pmatrix} -3 & -6 & 3 & -12 & 6 \\ -27 & -60 & 29 & -120 & 60 \\ -8 & -19 & 9 & -38 & 19 \\ 17 & 37 & -18 & 74 & -37 \\ 10 & 20 & -10 & 40 & -20 \end{pmatrix}$$

.301

$$A = \begin{pmatrix} -3 & 4 & 7 & 4 & 3 \\ 12 & 0 & -4 & -5 & -3 \\ -10 & -4 & -6 & 1 & -4 \\ -1 & 7 & 17 & 6 & 12 \\ 10 & 1 & 2 & -3 & 3 \end{pmatrix}$$

.302

$$A = \begin{pmatrix} -10 & -27 & 5 & -1 & -6 \\ 0 & -2 & 0 & -1 & -1 \\ -4 & -10 & 2 & 0 & -2 \\ -17 & -52 & 7 & -2 & -11 \\ 19 & 57 & -8 & 2 & 12 \end{pmatrix}$$

.303

$$A = \begin{pmatrix} 95 & -59 & -52 & 38 & 55 \\ 152 & -97 & -83 & 63 & 87 \\ 92 & -57 & -51 & 37 & 53 \\ 161 & -103 & -88 & 67 & 92 \\ -24 & 16 & 12 & -10 & -14 \end{pmatrix}$$

.304

$$A = \begin{pmatrix} 10 & 10 & -30 & -20 & -20 \\ -9 & -9 & 27 & 18 & 18 \\ -7 & -7 & 21 & 14 & 14 \\ -20 & -20 & 60 & 40 & 40 \\ 31 & 31 & -93 & -62 & -62 \end{pmatrix}$$

.305

$$A = \begin{pmatrix} 9 & -9 & -3 & 3 & 6 \\ 9 & -9 & -3 & 3 & 6 \\ -9 & 9 & 3 & -3 & -6 \\ -3 & 3 & 1 & -1 & -2 \\ -3 & 3 & 1 & -1 & -2 \end{pmatrix}$$

.306

$$A = \begin{pmatrix} -10 & 5 & -3 & -15 & -4 \\ 2 & -1 & 0 & 3 & 0 \\ -4 & -4 & 0 & -5 & 1 \\ 8 & -5 & 2 & 12 & 3 \\ 3 & 3 & 0 & 4 & -1 \end{pmatrix}$$

.307

$$A = \begin{pmatrix} -15 & -30 & -30 & -10 & 5 \\ -78 & -160 & -160 & -52 & 24 \\ 90 & 184 & 184 & 60 & -28 \\ -21 & -48 & -48 & -14 & 4 \\ -21 & -46 & -46 & -14 & 5 \end{pmatrix}$$

.308

$$A = \begin{pmatrix} 7 & -2 & -162 & 11 & -146 \\ 2 & 0 & -33 & 3 & -33 \\ -1 & 0 & 18 & -2 & 17 \\ -1 & 1 & 32 & -1 & 27 \\ 1 & 0 & -26 & 1 & -24 \end{pmatrix}$$

.309

$$A = \begin{pmatrix} -5 & 7 & -1 & 0 & -4 \\ -2 & 4 & -2 & 0 & -4 \\ -9 & 9 & 3 & 0 & 0 \\ -22 & 23 & 6 & 0 & -2 \\ 5 & -4 & -3 & 0 & -2 \end{pmatrix}$$

.310

$$A = \begin{pmatrix} 12 & 12 & -6 & -9 & 15 \\ -20 & -20 & 9 & 14 & -24 \\ 9 & 9 & -4 & -6 & 11 \\ -4 & -4 & 2 & 3 & -5 \\ 8 & 8 & -3 & -5 & 9 \end{pmatrix}$$

.311

$$A = \begin{pmatrix} -8 & -4 & -12 & -4 & -4 \\ -6 & -3 & -9 & -3 & -3 \\ 4 & 2 & 6 & 2 & 2 \\ -2 & -1 & -3 & -1 & -1 \\ 12 & 6 & 18 & 6 & 6 \end{pmatrix}$$

.312

$$A = \begin{pmatrix} 0 & -23 & -25 & -32 & 18 \\ 2 & -25 & -27 & -31 & 18 \\ -2 & 12 & 13 & 13 & -8 \\ 0 & 19 & 20 & 26 & -14 \\ -2 & 19 & 21 & 23 & -14 \end{pmatrix}$$

.313

$$A = \begin{pmatrix} -2 & 3 & 11 & -10 & 1 \\ -1 & 4 & 18 & -17 & 1 \\ 1 & -1 & -1 & 1 & 0 \\ 1 & 0 & 3 & -3 & 0 \\ -5 & 5 & 15 & -13 & 2 \end{pmatrix}$$

.314

$$A = \begin{pmatrix} 8 & 2 & -8 & 7 & 12 \\ -41 & -7 & 43 & -38 & -59 \\ 11 & 2 & -12 & 10 & 16 \\ -25 & -5 & 26 & -23 & -37 \\ 24 & 4 & -25 & 22 & 34 \end{pmatrix}$$

.315

$$A = \begin{pmatrix} 24 & 7 & -39 & -2 & 0 \\ -15 & -5 & 24 & 1 & 0 \\ 11 & 3 & -18 & -1 & 0 \\ 19 & 7 & -30 & -1 & 0 \\ -4 & -2 & 6 & 0 & 0 \end{pmatrix}$$

.316

$$A = \begin{pmatrix} 34 & 38 & -28 & -56 & -44 \\ -14 & -14 & 8 & 19 & 14 \\ -19 & -21 & 16 & 31 & 24 \\ 56 & 64 & -50 & -96 & -76 \\ -45 & -51 & 39 & 76 & 60 \end{pmatrix}$$

.317

$$A = \begin{pmatrix} 0 & 0 & 0 & 0 & 1 \\ 8 & -2 & 10 & -1 & -4 \\ 2 & -1 & 3 & 0 & -2 \\ 10 & -3 & 13 & -1 & -4 \\ 0 & -2 & 2 & 1 & 0 \end{pmatrix}$$

.318

$$A = \begin{pmatrix} -90 & -78 & 96 & 85 & 3 \\ 21 & 17 & -21 & -20 & 0 \\ -18 & -15 & 18 & 17 & 0 \\ -60 & -51 & 64 & 57 & 2 \\ 54 & 47 & -58 & -51 & -2 \end{pmatrix}$$

.319

$$A = \begin{pmatrix} -44 & 75 & 19 & -28 & 37 \\ -60 & 103 & 25 & -39 & 52 \\ 30 & -52 & -12 & 20 & -27 \\ -36 & 62 & 14 & -24 & 32 \\ 26 & -45 & -11 & 17 & -23 \end{pmatrix}$$

.320

$$A = \begin{pmatrix} -14 & 6 & 18 & -4 & 20 \\ 7 & -3 & -9 & 2 & -10 \\ 33 & -13 & -39 & 10 & -44 \\ 8 & -4 & -12 & 2 & -13 \\ -40 & 16 & 48 & -12 & 54 \end{pmatrix}$$

.321

$$A = \begin{pmatrix} 4 & -69 & 11 & -66 & -143 & 81 \\ -2 & 21 & -3 & 19 & 44 & -25 \\ 0 & 5 & -1 & 5 & 10 & -6 \\ -2 & 39 & -6 & 37 & 80 & -46 \\ 2 & -33 & 5 & -31 & -68 & 39 \\ 0 & -6 & 1 & -6 & -12 & 7 \end{pmatrix}$$

.322

$$A = \begin{pmatrix} -19 & 11 & 16 & 19 & -11 & 6 \\ -8 & 6 & 6 & 7 & -5 & 3 \\ -7 & 6 & 5 & 5 & -5 & 3 \\ -7 & 4 & 6 & 7 & -4 & 2 \\ 5 & -1 & -5 & -7 & 2 & -1 \\ 2 & -2 & -1 & -2 & 1 & -1 \end{pmatrix}$$

.323

$$A = \begin{pmatrix} 2 & -4 & -6 & 6 & 1 & -20 \\ -4 & 8 & 10 & -11 & -3 & 38 \\ -2 & 3 & 2 & -3 & -1 & 13 \\ 0 & -1 & -4 & 3 & 0 & -7 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 2 & -3 & -4 & 4 & 0 & -15 \end{pmatrix}$$

.324

$$A = \begin{pmatrix} 52 & -1 & -76 & 22 & -49 & 7 \\ 18 & 0 & -27 & 9 & -18 & 0 \\ -8 & 0 & 12 & -4 & 8 & 0 \\ 18 & -1 & -25 & 5 & -15 & 7 \\ 74 & -3 & -108 & 30 & -69 & 10 \\ -16 & 0 & 24 & -8 & 16 & 0 \end{pmatrix}$$

.325

$$A = \begin{pmatrix} -58 & -33 & 85 & 13 & 56 & 48 \\ 84 & 49 & -122 & -19 & -80 & -71 \\ 50 & 30 & -73 & -10 & -48 & -43 \\ -50 & -29 & 73 & 11 & 48 & 42 \\ -101 & -60 & 149 & 20 & 98 & 86 \\ 31 & 19 & -46 & -6 & -30 & -27 \end{pmatrix}$$

.326

$$A = \begin{pmatrix} -12 & 3 & -6 & -13 & 19 & -22 \\ -45 & 19 & -24 & -50 & 77 & -95 \\ -66 & 35 & -40 & -89 & 129 & -174 \\ 56 & -23 & 30 & 64 & -96 & 120 \\ -26 & 11 & -15 & -34 & 48 & -63 \\ -37 & 14 & -20 & -43 & 64 & -79 \end{pmatrix}$$

.327

$$A = \begin{pmatrix} -121 & -6 & 97 & -44 & 97 & 106 \\ 68 & 2 & -55 & 22 & -55 & -58 \\ -47 & -2 & 38 & -16 & 38 & 40 \\ -47 & -2 & 38 & -16 & 38 & 40 \\ -61 & -3 & 49 & -23 & 49 & 54 \\ -55 & -3 & 44 & -20 & 44 & 48 \end{pmatrix}$$

.328

$$A = \begin{pmatrix} 9 & 22 & -23 & 18 & -13 & -3 \\ 18 & 79 & -77 & 68 & -50 & -12 \\ 19 & 57 & -58 & 48 & -35 & -8 \\ -31 & -150 & 144 & -127 & 93 & 24 \\ -39 & -167 & 162 & -141 & 103 & 26 \\ 0 & 35 & -31 & 32 & -24 & -6 \end{pmatrix}$$

.329

$$A = \begin{pmatrix} 32 & -67 & 31 & 42 & 16 & -55 \\ 27 & -57 & 26 & 35 & 14 & -47 \\ 4 & -9 & 3 & 6 & 4 & -9 \\ -11 & 23 & -10 & -14 & -6 & 19 \\ -10 & 20 & -11 & -12 & -2 & 14 \\ -23 & 48 & -23 & -29 & -10 & 38 \end{pmatrix}$$

.330

$$A = \begin{pmatrix} -2 & 13 & -8 & -7 & 25 & 12 \\ 0 & -3 & 2 & 1 & -5 & -2 \\ 0 & -7 & 5 & 4 & -14 & -6 \\ -1 & 8 & -5 & -4 & 15 & 7 \\ 1 & -9 & 6 & 6 & -19 & -9 \\ -3 & 25 & -16 & -14 & 49 & 23 \end{pmatrix}$$

.331

$$A = \begin{pmatrix} 12 & -42 & -95 & 19 & 64 & 38 \\ 3 & -12 & -26 & 5 & 17 & 10 \\ -5 & 19 & 41 & -8 & -27 & -16 \\ 4 & -7 & -18 & 4 & 14 & 9 \\ -1 & 2 & 4 & -1 & -3 & -2 \\ -13 & 47 & 106 & -21 & -71 & -42 \end{pmatrix}$$

.332

$$A = \begin{pmatrix} 41 & 38 & -59 & -1 & -106 & -71 \\ 14 & 13 & -20 & -1 & -29 & -22 \\ 44 & 42 & -64 & -3 & -100 & -72 \\ -40 & -38 & 58 & 2 & 96 & 67 \\ -7 & -6 & 9 & -1 & 19 & 12 \\ 5 & 3 & -5 & 3 & -23 & -11 \end{pmatrix}$$

.333

$$A = \begin{pmatrix} 33 & -28 & -87 & 40 & 94 & -66 \\ -19 & 16 & 50 & -23 & -54 & 38 \\ 31 & -26 & -81 & 38 & 88 & -62 \\ -31 & 26 & 81 & -38 & -88 & 62 \\ 12 & -10 & -31 & 15 & 34 & -24 \\ -18 & 15 & 47 & -22 & -51 & 36 \end{pmatrix}$$

.334

$$A = \begin{pmatrix} -15 & -15 & -17 & -9 & -13 & 6 \\ 35 & 28 & 36 & 17 & 33 & -18 \\ -28 & -23 & -29 & -14 & -26 & 14 \\ -6 & -3 & -5 & -2 & -6 & 4 \\ 5 & 7 & 7 & 4 & 4 & -1 \\ -27 & -21 & -27 & -13 & -25 & 14 \end{pmatrix}$$

.335

$$A = \begin{pmatrix} -3 & -4 & -12 & -2 & 18 & -13 \\ 51 & 26 & -12 & 40 & -36 & -37 \\ -36 & -19 & 10 & -29 & 21 & 29 \\ -27 & -12 & 13 & -21 & 12 & 27 \\ -4 & -3 & -4 & -3 & 9 & -3 \\ 18 & 9 & -10 & 15 & -3 & -21 \end{pmatrix}$$

.336

$$A = \begin{pmatrix} 13 & -5 & -3 & -3 & 1 & 1 \\ 17 & -7 & -8 & -4 & 0 & 8 \\ 29 & -10 & 0 & -8 & 6 & -8 \\ 3 & -2 & -1 & 3 & -3 & -1 \\ -10 & 3 & 2 & 6 & -4 & -2 \\ 17 & -6 & 0 & -4 & 3 & -5 \end{pmatrix}$$

.337

$$A = \begin{pmatrix} 0 & -30 & 37 & 7 & 23 & 23 \\ 2 & 24 & -26 & -6 & -17 & -16 \\ 0 & 21 & -26 & -5 & -16 & -16 \\ 1 & -12 & 18 & 4 & 9 & 10 \\ 4 & 22 & -20 & -6 & -14 & -12 \\ -3 & -21 & 22 & 7 & 13 & 12 \end{pmatrix}$$

.338

$$A = \begin{pmatrix} -55 & -70 & -28 & -19 & -24 & -1 \\ 45 & 58 & 24 & 15 & 19 & -1 \\ -58 & -73 & -29 & -22 & -28 & -5 \\ 44 & 43 & 9 & 23 & 31 & 23 \\ 32 & 47 & 22 & 9 & 10 & -6 \\ -43 & -51 & -18 & -17 & -22 & -7 \end{pmatrix}$$

.339

$$A = \begin{pmatrix} -30 & -3 & 5 & -5 & -24 & 32 \\ 60 & 8 & -11 & 13 & 48 & -64 \\ 5 & -1 & -2 & -1 & 7 & -8 \\ -39 & -6 & 6 & -10 & -29 & 40 \\ -53 & -8 & 7 & -13 & -38 & 53 \\ -69 & -9 & 11 & -15 & -53 & 72 \end{pmatrix}$$

.340

$$A = \begin{pmatrix} 5 & -1 & -5 & 3 & -4 & -1 \\ -134 & 54 & 117 & -111 & 97 & 3 \\ -132 & 56 & 113 & -112 & 94 & -1 \\ -73 & 29 & 64 & -60 & 53 & 2 \\ 158 & -66 & -136 & 133 & -113 & 0 \\ -33 & 13 & 29 & -27 & 24 & 1 \end{pmatrix}$$

.341

$$A = \begin{pmatrix} 0 & -156 & -14 & -74 & -82 & 22 \\ 0 & -42 & -4 & -20 & -22 & 6 \\ 0 & -57 & -5 & -27 & -30 & 8 \\ 1 & 24 & 5 & 13 & 13 & -5 \\ -1 & 24 & 0 & 10 & 12 & -2 \\ 1 & -168 & -12 & -78 & -88 & 22 \end{pmatrix}$$

.342

$$A = \begin{pmatrix} 10 & -9 & 3 & -10 & -11 & -2 \\ -12 & 9 & -3 & 11 & 10 & 1 \\ 31 & -27 & 11 & -28 & -32 & 0 \\ 19 & -16 & 6 & -18 & -18 & -1 \\ 13 & -11 & 4 & -12 & -13 & -1 \\ -21 & 18 & -7 & 19 & 22 & 1 \end{pmatrix}$$

.343

$$A = \begin{pmatrix} 9 & 6 & -39 & 2 & -68 & 37 \\ -2 & -2 & 14 & -1 & 23 & -13 \\ -8 & -8 & 44 & -4 & 74 & -40 \\ 6 & 0 & -12 & -2 & -25 & 14 \\ 7 & 4 & -31 & 1 & -54 & 30 \\ 4 & -2 & -2 & -3 & -8 & 5 \end{pmatrix}$$

.344

$$A = \begin{pmatrix} 4 & 7 & -5 & 11 & 3 & -5 \\ 16 & 21 & -13 & 33 & 7 & -17 \\ -23 & -32 & 21 & -51 & -11 & 26 \\ -43 & -60 & 35 & -92 & -21 & 47 \\ 19 & 28 & -16 & 42 & 10 & -21 \\ -33 & -46 & 26 & -70 & -16 & 36 \end{pmatrix}$$

.345

$$A = \begin{pmatrix} 2 & -4 & 22 & -6 & -10 & 16 \\ -3 & 6 & -24 & 10 & 13 & -20 \\ -2 & 1 & -10 & 3 & 4 & -7 \\ 0 & -6 & 23 & -5 & -11 & 16 \\ 4 & -6 & 18 & -12 & -12 & 18 \\ 2 & -7 & 24 & -9 & -13 & 19 \end{pmatrix}$$

.346

$$A = \begin{pmatrix} 98 & 45 & 180 & 123 & -119 & 53 \\ 4 & 1 & 5 & 5 & -4 & 0 \\ -85 & -38 & -153 & -106 & 100 & -45 \\ -54 & -25 & -100 & -68 & 66 & -30 \\ -74 & -34 & -135 & -92 & 89 & -39 \\ 62 & 28 & 112 & 77 & -73 & 33 \end{pmatrix}$$

.347

$$A = \begin{pmatrix} -59 & 26 & 74 & 50 & -21 & 7 \\ 47 & -20 & -61 & -39 & 14 & -4 \\ -81 & 35 & 103 & 67 & -27 & 7 \\ 57 & -24 & -74 & -46 & 17 & -3 \\ 62 & -26 & -79 & -52 & 20 & -6 \\ -52 & 23 & 66 & 41 & -18 & 2 \end{pmatrix}$$

.348

$$A = \begin{pmatrix} -42 & -18 & -24 & -6 & 14 & 42 \\ -93 & -42 & -54 & -15 & 31 & 93 \\ -99 & -46 & -58 & -17 & 33 & 99 \\ 165 & 75 & 96 & 27 & -55 & -165 \\ -3 & -2 & -2 & -1 & 1 & 3 \\ -114 & -51 & -66 & -18 & 38 & 114 \end{pmatrix}$$

.349

$$A = \begin{pmatrix} 15 & 39 & 39 & 11 & 8 & -1 \\ 36 & 96 & 96 & 28 & 19 & -2 \\ -47 & -123 & -123 & -35 & -25 & 3 \\ 26 & 66 & 66 & 18 & 14 & -2 \\ -17 & -45 & -45 & -13 & -9 & 1 \\ -47 & -123 & -123 & -35 & -25 & 3 \end{pmatrix}$$

.350

$$A = \begin{pmatrix} 16 & -6 & -18 & -8 & 0 & 0 \\ 0 & 2 & -2 & 2 & -5 & -2 \\ 10 & -6 & -10 & -6 & 3 & 2 \\ 10 & 1 & -13 & -4 & -4 & -4 \\ 1 & 2 & -2 & 0 & -2 & -2 \\ -3 & 3 & 1 & 4 & -6 & -2 \end{pmatrix}$$

.351

$$A = \begin{pmatrix} -8 & 8 & 38 & 4 & -48 & -36 \\ 23 & -14 & -89 & -7 & 111 & 81 \\ 3 & 2 & -3 & 1 & 3 & 1 \\ -20 & -4 & 41 & -2 & -48 & -30 \\ -1 & 10 & 25 & 5 & -33 & -27 \\ 10 & -16 & -61 & -8 & 78 & 60 \end{pmatrix}$$

.352

$$A = \begin{pmatrix} 2 & 0 & 3 & 7 & 8 & 4 \\ -2 & -5 & -5 & -10 & -17 & -2 \\ -3 & -26 & -15 & -23 & -54 & 4 \\ -10 & -41 & -30 & -51 & -101 & -3 \\ 6 & 29 & 21 & 35 & 71 & 1 \\ 5 & 32 & 21 & 33 & 72 & -2 \end{pmatrix}$$

.353

$$A = \begin{pmatrix} -6 & 0 & 6 & 3 & -3 & -9 \\ -7 & -3 & 7 & 8 & -7 & -14 \\ -4 & 0 & 4 & 2 & -2 & -6 \\ 1 & -3 & -1 & 4 & -3 & -2 \\ 8 & 0 & -8 & -4 & 4 & 12 \\ -2 & 0 & 2 & 1 & -1 & -3 \end{pmatrix}$$

.354

$$A = \begin{pmatrix} -58 & 53 & 63 & -14 & 8 & -88 \\ -21 & 19 & 25 & -5 & 2 & -34 \\ 1 & -1 & -2 & 0 & 0 & 3 \\ 73 & -68 & -80 & 17 & -11 & 111 \\ -17 & 18 & 20 & -3 & 4 & -26 \\ 13 & -12 & -14 & 3 & -2 & 20 \end{pmatrix}$$

.355

$$A = \begin{pmatrix} -4 & 6 & 6 & 0 & -2 & 2 \\ 4 & -6 & -6 & 0 & 2 & -2 \\ -6 & 9 & 9 & 0 & -3 & 3 \\ 2 & -3 & -3 & 0 & 1 & -1 \\ 2 & -3 & -3 & 0 & 1 & -1 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}$$

.356

$$A = \begin{pmatrix} 12 & -19 & -21 & 12 & 10 & -14 \\ 13 & -20 & -21 & 13 & 12 & -14 \\ 5 & -8 & -9 & 5 & 4 & -6 \\ -21 & 33 & 36 & -21 & -18 & 24 \\ 11 & -17 & -18 & 11 & 10 & -12 \\ -25 & 39 & 42 & -25 & -22 & 28 \end{pmatrix}$$

.357

$$A = \begin{pmatrix} 1 & 5 & -8 & 10 & 7 & -8 \\ 18 & 0 & -35 & 26 & 20 & -36 \\ 11 & 2 & -24 & 20 & 15 & -25 \\ -11 & 1 & 20 & -15 & -13 & 22 \\ -13 & 2 & 23 & -15 & -11 & 23 \\ -26 & 3 & 47 & -33 & -26 & 49 \end{pmatrix}$$

.358

$$A = \begin{pmatrix} 8 & -72 & -42 & -8 & 54 & 84 \\ -6 & 63 & 35 & 7 & -46 & -72 \\ -3 & 39 & 19 & 5 & -26 & -45 \\ -1 & 2 & 3 & 0 & -3 & -3 \\ -6 & 68 & 36 & 8 & -48 & -78 \\ -4 & 36 & 21 & 4 & -27 & -42 \end{pmatrix}$$

.359

$$A = \begin{pmatrix} -90 & 42 & 68 & 23 & 38 & 45 \\ -26 & 11 & 21 & 7 & 10 & 13 \\ -23 & 10 & 18 & 6 & 9 & 12 \\ -101 & 46 & 77 & 26 & 42 & 51 \\ -36 & 18 & 27 & 9 & 15 & 18 \\ -40 & 19 & 29 & 10 & 18 & 20 \end{pmatrix}$$

.360

$$A = \begin{pmatrix} -4 & 4 & 7 & 14 & -21 & 17 \\ 22 & -20 & -30 & -59 & 65 & -63 \\ -32 & 29 & 44 & 86 & -96 & 93 \\ -4 & 4 & 6 & 12 & -15 & 13 \\ 2 & -2 & -2 & -3 & 0 & -2 \\ 12 & -11 & -16 & -30 & 31 & -32 \end{pmatrix}$$

.361

$$A = \begin{pmatrix} -4 & -28 & -14 & 12 & 22 & 14 \\ 2 & 14 & 7 & -6 & -11 & -7 \\ 0 & -3 & -2 & 2 & 3 & 2 \\ -4 & -25 & -12 & 10 & 19 & 12 \\ -10 & -64 & -31 & 26 & 49 & 31 \\ 22 & 139 & 67 & -56 & -106 & -67 \end{pmatrix}$$

.362

$$A = \begin{pmatrix} 36 & -13 & 36 & -39 & 24 & -10 \\ 33 & -12 & 33 & -36 & 22 & -9 \\ 18 & -7 & 18 & -21 & 12 & -4 \\ 21 & -8 & 21 & -24 & 14 & -5 \\ -9 & 3 & -9 & 9 & -6 & 3 \\ 48 & -18 & 48 & -54 & 32 & -12 \end{pmatrix}$$

.363

$$A = \begin{pmatrix} -89 & 51 & -7 & -56 & 40 & 68 \\ 69 & -38 & 9 & 42 & -27 & -58 \\ -83 & 47 & -9 & -52 & 36 & 66 \\ -57 & 32 & -6 & -36 & 24 & 46 \\ -151 & 85 & -16 & -94 & 64 & 121 \\ -136 & 77 & -14 & -86 & 59 & 108 \end{pmatrix}$$

.364

$$A = \begin{pmatrix} 56 & -34 & 94 & 13 & -23 & 0 \\ 35 & -12 & 50 & -4 & -28 & 4 \\ 0 & 5 & -5 & -6 & -7 & 2 \\ -29 & 16 & -46 & -4 & 14 & 0 \\ 65 & -35 & 105 & 10 & -33 & 2 \\ 53 & -36 & 92 & 17 & -16 & -2 \end{pmatrix}$$

.365

$$A = \begin{pmatrix} -5 & 9 & -6 & -8 & -1 & 1 \\ -2 & 7 & -9 & -11 & 3 & -4 \\ -10 & 24 & -26 & -33 & 6 & -8 \\ 8 & -17 & 14 & 18 & -1 & 1 \\ 2 & -2 & 1 & 2 & 0 & -1 \\ 1 & -2 & 8 & 11 & -6 & 6 \end{pmatrix}$$

.366

$$A = \begin{pmatrix} -24 & -17 & 0 & 7 & 30 & 125 \\ -38 & -26 & 0 & 8 & 48 & 194 \\ -36 & -25 & 0 & 7 & 46 & 185 \\ 8 & 5 & 0 & -1 & -10 & -39 \\ 13 & 8 & 0 & -2 & -16 & -63 \\ -13 & -9 & 0 & 4 & 16 & 67 \end{pmatrix}$$

.367

$$A = \begin{pmatrix} -4 & -5 & -1 & 0 & 3 & 4 \\ 24 & 34 & 5 & 5 & -24 & -26 \\ 45 & 63 & 9 & 12 & -45 & -48 \\ 2 & 2 & 0 & -1 & 0 & -1 \\ -4 & -6 & -1 & -4 & 6 & 5 \\ 41 & 58 & 8 & 12 & -42 & -44 \end{pmatrix}$$

.368

$$A = \begin{pmatrix} -138 & 116 & -164 & -85 & 56 & 137 \\ -22 & 19 & -26 & -14 & 9 & 22 \\ 91 & -77 & 108 & 56 & -37 & -90 \\ -2 & 3 & -2 & -2 & 1 & 2 \\ -32 & 27 & -38 & -20 & 13 & 32 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}$$

.369

$$A = \begin{pmatrix} -2 & -9 & -2 & 2 & -2 & 5 \\ 2 & 4 & 1 & 0 & -1 & -2 \\ -2 & -13 & -8 & 27 & -7 & 23 \\ -2 & -1 & 0 & -3 & 3 & -1 \\ -2 & -7 & -2 & 3 & -1 & 5 \\ 2 & -4 & -3 & 14 & -7 & 10 \end{pmatrix}$$

.370

$$A = \begin{pmatrix} 2 & -4 & 5 & 4 & -2 & 1 \\ 29 & 10 & 0 & -1 & 21 & -16 \\ 21 & 11 & -4 & -5 & 18 & -13 \\ -14 & -6 & 1 & 2 & -11 & 8 \\ -50 & -10 & -8 & 0 & -31 & 23 \\ -43 & -13 & -2 & 7 & -30 & 21 \end{pmatrix}$$

.371

$$A = \begin{pmatrix} -24 & -77 & 5 & 12 & -28 & 0 & 24 \\ 34 & 104 & -12 & -14 & 40 & 1 & -29 \\ -16 & -57 & 4 & 9 & -22 & -1 & 18 \\ 21 & 58 & -10 & -7 & 23 & 1 & -14 \\ -64 & -199 & 21 & 28 & -76 & -2 & 58 \\ 38 & 108 & -16 & -13 & 42 & 1 & -28 \\ 2 & 6 & 0 & -1 & 2 & 0 & -2 \end{pmatrix}$$

.372

$$A = \begin{pmatrix} 20 & 53 & -58 & -1 & -57 & -46 & 95 \\ 8 & 23 & -14 & 3 & -24 & -11 & 39 \\ 17 & 46 & -45 & 2 & -48 & -35 & 81 \\ 16 & 34 & -41 & -4 & -38 & -31 & 61 \\ -6 & -6 & 11 & 4 & 8 & 7 & -11 \\ -29 & -74 & 76 & 0 & 79 & 59 & -131 \\ -16 & -35 & 34 & 1 & 38 & 25 & -61 \end{pmatrix}$$

.373

$$A = \begin{pmatrix} -10 & 24 & 37 & -10 & -27 & 25 & 24 \\ -27 & 67 & 100 & -25 & -74 & 70 & 65 \\ -29 & 34 & 70 & -32 & -45 & 37 & 45 \\ 31 & -65 & -105 & 32 & 75 & -68 & -68 \\ -17 & 69 & 92 & -14 & -72 & 71 & 60 \\ -13 & 29 & 48 & -15 & -34 & 30 & 31 \\ 75 & -88 & -182 & 84 & 117 & -95 & -117 \end{pmatrix}$$

.374

$$A = \begin{pmatrix} -7 & -13 & 19 & -1 & 3 & -21 & -2 \\ -5 & 7 & 32 & 4 & -12 & -15 & 11 \\ -11 & 13 & 67 & 8 & -24 & -33 & 22 \\ 20 & -16 & -111 & -12 & 36 & 60 & -33 \\ -2 & 10 & 23 & 4 & -12 & -6 & 11 \\ -7 & 15 & 50 & 7 & -21 & -21 & 19 \\ 13 & -11 & -73 & -8 & 24 & 39 & -22 \end{pmatrix}$$

.375

$$A = \begin{pmatrix} -3 & -35 & 13 & 29 & 55 & 15 & 42 \\ 4 & 29 & -8 & -4 & -19 & -2 & -39 \\ -6 & -69 & 23 & 45 & 91 & 22 & 85 \\ -5 & -88 & 32 & 82 & 150 & 43 & 102 \\ 7 & 106 & -38 & -94 & -174 & -49 & -124 \\ -4 & -79 & 29 & 76 & 138 & 40 & 91 \\ 1 & -6 & 5 & 25 & 36 & 13 & 3 \end{pmatrix}$$

.376

$$A = \begin{pmatrix} 11 & -82 & 52 & -46 & -38 & -9 & -26 \\ 0 & 3 & -1 & 2 & -1 & 2 & 1 \\ 9 & -72 & 46 & -40 & -33 & -8 & -23 \\ 10 & -85 & 50 & -48 & -28 & -14 & -26 \\ 0 & -2 & 2 & -1 & -2 & 0 & -1 \\ -10 & 73 & -44 & 41 & 29 & 9 & 22 \\ 8 & -61 & 38 & -34 & -27 & -7 & -19 \end{pmatrix}$$

.377

$$A = \begin{pmatrix} 60 & 7 & 29 & 1 & -2 & -15 & 39 \\ 176 & 21 & 82 & -1 & -11 & -41 & 115 \\ -24 & -3 & -12 & 0 & 0 & 6 & -15 \\ 137 & 16 & 64 & 1 & -7 & -33 & 90 \\ -8 & -1 & -4 & 0 & 0 & 2 & -5 \\ 128 & 15 & 60 & 1 & -7 & -31 & 84 \\ -60 & -7 & -29 & -1 & 2 & 15 & -39 \end{pmatrix}$$

.378

$$A = \begin{pmatrix} 74 & -43 & -88 & 12 & -63 & -71 & -63 \\ -60 & 38 & 69 & -16 & 55 & 56 & 55 \\ 89 & -53 & -106 & 15 & -77 & -85 & -76 \\ 43 & -28 & -50 & 11 & -40 & -40 & -39 \\ 16 & -12 & -17 & 8 & -17 & -14 & -17 \\ -105 & 65 & 123 & -23 & 94 & 99 & 93 \\ 113 & -69 & -133 & 23 & -100 & -107 & -99 \end{pmatrix}$$

.379

$$A = \begin{pmatrix} 11 & -4 & 3 & -3 & 11 & -9 & 9 \\ -19 & 8 & -4 & 7 & -22 & 16 & -13 \\ 6 & -2 & 2 & -3 & 7 & -5 & 4 \\ -8 & 6 & -1 & 0 & -7 & 10 & -11 \\ -12 & 6 & -2 & 3 & -13 & 11 & -10 \\ 7 & -2 & 2 & -3 & 8 & -5 & 4 \\ -5 & 2 & -1 & 2 & -6 & 4 & -3 \end{pmatrix}$$

.380

$$A = \begin{pmatrix} 12 & 18 & -8 & -11 & 10 & 23 & 9 \\ 32 & 54 & -32 & -32 & 24 & 60 & 36 \\ -52 & -95 & 64 & 55 & -38 & -97 & -71 \\ 59 & 103 & -66 & -61 & 43 & 109 & 73 \\ -49 & -86 & 56 & 51 & -35 & -90 & -62 \\ 23 & 42 & -30 & -25 & 15 & 41 & 33 \\ -57 & -102 & 68 & 60 & -41 & -105 & -75 \end{pmatrix}$$

.381

$$A = \begin{pmatrix} 145 & 112 & 43 & -33 & -30 & -7 & -78 \\ -168 & -130 & -53 & 38 & 33 & 7 & 93 \\ -154 & -119 & -47 & 34 & 30 & 7 & 83 \\ -26 & -21 & -5 & 4 & 5 & 1 & 11 \\ 95 & 74 & 28 & -20 & -18 & -4 & -50 \\ 111 & 86 & 33 & -25 & -23 & -5 & -60 \\ -93 & -71 & -29 & 22 & 19 & 5 & 51 \end{pmatrix}$$

.382

$$A = \begin{pmatrix} -34 & -8 & 44 & 50 & 66 & -13 & -13 \\ 4 & -1 & -10 & -7 & -14 & 3 & 4 \\ 27 & 8 & -31 & -39 & -47 & 9 & 8 \\ -16 & -4 & 19 & 22 & 30 & -6 & -6 \\ -17 & -3 & 23 & 24 & 35 & -7 & -7 \\ 51 & 13 & -65 & -76 & -97 & 19 & 19 \\ -27 & -7 & 34 & 40 & 51 & -10 & -10 \end{pmatrix}$$

.383

$$A = \begin{pmatrix} 36 & -34 & -16 & -47 & -21 & -23 & 29 \\ -37 & 28 & 10 & 33 & 29 & 21 & -50 \\ 2 & 4 & 5 & 12 & -8 & 1 & 21 \\ 12 & -15 & -9 & -24 & -3 & -9 & -1 \\ -21 & 20 & 8 & 27 & 14 & 14 & -17 \\ 85 & -67 & -23 & -79 & -68 & -50 & 111 \\ -16 & 15 & 8 & 23 & 7 & 10 & -9 \end{pmatrix}$$

.384

$$A = \begin{pmatrix} 0 & 3 & 0 & 0 & 3 & 1 & 2 \\ 4 & 16 & 11 & -8 & 16 & 17 & 6 \\ 10 & 48 & 35 & -27 & 47 & 53 & 16 \\ -4 & -8 & -6 & 3 & -8 & -9 & -3 \\ -7 & -22 & -18 & 12 & -21 & -26 & -6 \\ -8 & -40 & -27 & 21 & -40 & -42 & -15 \\ 7 & 30 & 23 & -17 & 29 & 34 & 9 \end{pmatrix}$$

.385

$$A = \begin{pmatrix} -5 & -1 & 3 & -9 & 9 & 0 & -5 \\ -4 & 3 & 1 & 1 & 1 & -1 & -1 \\ -8 & -33 & 13 & -85 & 74 & 7 & -31 \\ 6 & 1 & -1 & 11 & -13 & 1 & 4 \\ 2 & -6 & 2 & -11 & 8 & 2 & -4 \\ 10 & 8 & -9 & 33 & -31 & -2 & 16 \\ -7 & -33 & 10 & -83 & 73 & 6 & -28 \end{pmatrix}$$

.386

$$A = \begin{pmatrix} -78 & -197 & -39 & -82 & -158 & 80 & -2 \\ 34 & 86 & 17 & 36 & 69 & -35 & 1 \\ -18 & -46 & -9 & -20 & -37 & 19 & -1 \\ 4 & 10 & 2 & 4 & 8 & -4 & 0 \\ -4 & -10 & -2 & -4 & -8 & 4 & 0 \\ -6 & -15 & -3 & -6 & -12 & 6 & 0 \\ -44 & -111 & -22 & -46 & -89 & 45 & -1 \end{pmatrix}$$

.387

$$A = \begin{pmatrix} 6 & 37 & 0 & -52 & -50 & -68 & -12 \\ 9 & 64 & 2 & -82 & -91 & -118 & -29 \\ 20 & 82 & -5 & -113 & -103 & -152 & -22 \\ -4 & -19 & 1 & 27 & 24 & 35 & 5 \\ 13 & 49 & -4 & -68 & -60 & -91 & -12 \\ 0 & 22 & 3 & -28 & -35 & -40 & -13 \\ -7 & -32 & 2 & 46 & 40 & 59 & 8 \end{pmatrix}$$

.388

$$A = \begin{pmatrix} 12 & -4 & -32 & 10 & 4 & -22 & -1 \\ 67 & 45 & -52 & 31 & 86 & -55 & -30 \\ 50 & 66 & 43 & 8 & 101 & 3 & -32 \\ 86 & 59 & -64 & 39 & 111 & -69 & -39 \\ -53 & -43 & 18 & -21 & -78 & 31 & 26 \\ -52 & -89 & -93 & 0 & -128 & -29 & 40 \\ 74 & 46 & -69 & 36 & 90 & -67 & -32 \end{pmatrix}$$

.389

$$A = \begin{pmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 41 & 45 & -45 & 15 & 15 & -30 & -52 \\ 25 & 27 & -27 & 9 & 9 & -18 & -32 \\ -36 & -39 & 39 & -13 & -13 & 26 & 46 \\ 42 & 45 & -45 & 15 & 15 & -30 & -54 \\ 27 & 30 & -30 & 10 & 10 & -20 & -34 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}$$

.390

$$A = \begin{pmatrix} -52 & 32 & -8 & 0 & 18 & 15 & -7 \\ -51 & 31 & -7 & -1 & 20 & 14 & -7 \\ 172 & -104 & 22 & 7 & -61 & -50 & 22 \\ 132 & -80 & 17 & 5 & -48 & -38 & 17 \\ -2 & 2 & -1 & 1 & 0 & 1 & 0 \\ 41 & -25 & 4 & 3 & -19 & -11 & 5 \\ 34 & -19 & 5 & 1 & -9 & -10 & 5 \end{pmatrix}$$

.391

$$A = \begin{pmatrix} -39 & 71 & 53 & 48 & 29 & 9 & -52 \\ 24 & -43 & -32 & -27 & -14 & -7 & 31 \\ 56 & -102 & -76 & -68 & -40 & -14 & 74 \\ -35 & 63 & 47 & 41 & 23 & 9 & -46 \\ 5 & -9 & -7 & -6 & -4 & -1 & 7 \\ -67 & 122 & 91 & 80 & 46 & 18 & -88 \\ 78 & -142 & -106 & -94 & -55 & -20 & 103 \end{pmatrix}$$

.392

$$A = \begin{pmatrix} 110 & -157 & 127 & 127 & 119 & 19 & 158 \\ -19 & 24 & -17 & -17 & -20 & -2 & -24 \\ 81 & -120 & 102 & 102 & 88 & 16 & 122 \\ -49 & 71 & -59 & -59 & -53 & -9 & -72 \\ -58 & 78 & -59 & -59 & -62 & -8 & -78 \\ 79 & -111 & 89 & 89 & 85 & 13 & 112 \\ -87 & 126 & -105 & -105 & -94 & -16 & -128 \end{pmatrix}$$

.393

$$A = \begin{pmatrix} -17 & -22 & 32 & 42 & -31 & -49 & -19 \\ 12 & 17 & -25 & -31 & 25 & 37 & 14 \\ 17 & 35 & -48 & -49 & 52 & 65 & 22 \\ -3 & -9 & 13 & 11 & -15 & -16 & -5 \\ 7 & 16 & -23 & -23 & 25 & 30 & 10 \\ -10 & -12 & 20 & 29 & -18 & -30 & -12 \\ 38 & 47 & -69 & -95 & 65 & 107 & 42 \end{pmatrix}$$

.394

$$A = \begin{pmatrix} -10 & 194 & -102 & -62 & 75 & 47 & 35 \\ -8 & 80 & -40 & -28 & 26 & 17 & 18 \\ -38 & 80 & -25 & -49 & -13 & -1 & 47 \\ 34 & -63 & 17 & 41 & 16 & 3 & -41 \\ -16 & -23 & 21 & -4 & -31 & -16 & 12 \\ 6 & -149 & 79 & 46 & -60 & -37 & -25 \\ 16 & -10 & -3 & 15 & 18 & 6 & -18 \end{pmatrix}$$

.395

$$A = \begin{pmatrix} 88 & -78 & -58 & -11 & 83 & -1 & 88 \\ 163 & -148 & -107 & -23 & 164 & 4 & 157 \\ -43 & 42 & 28 & 8 & -51 & -5 & -37 \\ -29 & 28 & 19 & 5 & -34 & -3 & -26 \\ 82 & -74 & -54 & -11 & 81 & 1 & 80 \\ -111 & 100 & 73 & 15 & -110 & -2 & -108 \\ -53 & 48 & 35 & 7 & -52 & 0 & -52 \end{pmatrix}$$

.396

$$A = \begin{pmatrix} 2 & 8 & -2 & -6 & 4 & 2 & 2 \\ -10 & -42 & 12 & 30 & -17 & -8 & -14 \\ -11 & -59 & 18 & 41 & -23 & -12 & -20 \\ -16 & -79 & 23 & 56 & -33 & -17 & -25 \\ -10 & -53 & 15 & 38 & -24 & -13 & -15 \\ 5 & 14 & -2 & -12 & 8 & 3 & 3 \\ -6 & -43 & 14 & 29 & -18 & -11 & -13 \end{pmatrix}$$

.397

$$A = \begin{pmatrix} 98 & -66 & -42 & -17 & -96 & 126 & 28 \\ -26 & 18 & 14 & 3 & 25 & -37 & -8 \\ -23 & 15 & 10 & 4 & 22 & -30 & -7 \\ -3 & 3 & 2 & -1 & 3 & -5 & -1 \\ 81 & -55 & -38 & -13 & -79 & 107 & 24 \\ -23 & 15 & 10 & 4 & 22 & -30 & -7 \\ -55 & 37 & 25 & 10 & 54 & -71 & -16 \end{pmatrix}$$

.398

$$A = \begin{pmatrix} -26 & -76 & -12 & 13 & 31 & 48 & 8 \\ 2 & 6 & 2 & -1 & -4 & -6 & -2 \\ -2 & -7 & 0 & 1 & 2 & 3 & 0 \\ -24 & -78 & -12 & 12 & 36 & 54 & 12 \\ 40 & 125 & 19 & -20 & -54 & -82 & -16 \\ -32 & -94 & -14 & 16 & 36 & 56 & 8 \\ 6 & 6 & 1 & -3 & 5 & 5 & 6 \end{pmatrix}$$

.399

$$A = \begin{pmatrix} -20 & -6 & -44 & -11 & -6 & -14 & 5 \\ 19 & 5 & 46 & 13 & 7 & 18 & -5 \\ 1 & 1 & 0 & -1 & 0 & -1 & 0 \\ 14 & 3 & 36 & 11 & 5 & 14 & -4 \\ 33 & 8 & 73 & 20 & 10 & 24 & -9 \\ -16 & -5 & -36 & -9 & -5 & -12 & 4 \\ -27 & -10 & -59 & -13 & -9 & -20 & 6 \end{pmatrix}$$

.400

$$A = \begin{pmatrix} -23 & -15 & 5 & -29 & 23 & 11 & 11 \\ 19 & 8 & -10 & 30 & -30 & -21 & -21 \\ 44 & 38 & 2 & 43 & -22 & 3 & 3 \\ -4 & -7 & -5 & 1 & -7 & -10 & -10 \\ -19 & -27 & -15 & -4 & -17 & -30 & -30 \\ -19 & -8 & 10 & -30 & 30 & 21 & 21 \\ 6 & 8 & 4 & 2 & 4 & 8 & 8 \end{pmatrix}$$

.401

$$A = \begin{pmatrix} -10 & -15 & 45 & -6 & -21 & -7 & 34 \\ 6 & 15 & -33 & 10 & 22 & 4 & -24 \\ -16 & -18 & 62 & -6 & -25 & -10 & 47 \\ 12 & 24 & -62 & 11 & 33 & 8 & -46 \\ -16 & -33 & 83 & -16 & -45 & -9 & 61 \\ 10 & 15 & -43 & 7 & 21 & 6 & -32 \\ 14 & 12 & -50 & 3 & 18 & 11 & -39 \end{pmatrix}$$

.402

$$A = \begin{pmatrix} -7 & -6 & -7 & -7 & -5 & -5 & 5 \\ -74 & -74 & -65 & -67 & -45 & -34 & 57 \\ 65 & 60 & 58 & 62 & 40 & 37 & -50 \\ 57 & 60 & 51 & 51 & 36 & 24 & -45 \\ -10 & -6 & -10 & -12 & -7 & -11 & 8 \\ -86 & -85 & -74 & -77 & -51 & -39 & 67 \\ -25 & -21 & -20 & -22 & -13 & -13 & 18 \end{pmatrix}$$

.403

$$A = \begin{pmatrix} -8 & -48 & -42 & 22 & -8 & -12 & -32 \\ 26 & 85 & 74 & -50 & 5 & 38 & 46 \\ -15 & -40 & -35 & 25 & 0 & -20 & -20 \\ -34 & -138 & -121 & 71 & -14 & -46 & -84 \\ -3 & -25 & -22 & 10 & -5 & -4 & -18 \\ -36 & -136 & -119 & 73 & -12 & -50 & -80 \\ -27 & -101 & -88 & 56 & -9 & -40 & -58 \end{pmatrix}$$

.404

$$A = \begin{pmatrix} -84 & -54 & -35 & -142 & -74 & 22 & 38 \\ 9 & 5 & 4 & 15 & 8 & -2 & -4 \\ 61 & 35 & 26 & 104 & 54 & -15 & -25 \\ 70 & 40 & 30 & 119 & 62 & -17 & -29 \\ -78 & -40 & -35 & -133 & -70 & 16 & 28 \\ 41 & 23 & 19 & 69 & 37 & -8 & -15 \\ -31 & -19 & -14 & -52 & -28 & 6 & 12 \end{pmatrix}$$

.405

$$A = \begin{pmatrix} 14 & -10 & -30 & 17 & -7 & -30 & 4 \\ -34 & 28 & 71 & -35 & 23 & 71 & -3 \\ -23 & 19 & 51 & -27 & 13 & 51 & -5 \\ 13 & -10 & -27 & 14 & -8 & -27 & 2 \\ -8 & 8 & 17 & -7 & 7 & 17 & 1 \\ 53 & -43 & -114 & 59 & -32 & -114 & 9 \\ 22 & -20 & -47 & 22 & -17 & -47 & 0 \end{pmatrix}$$

.406

$$A = \begin{pmatrix} -61 & -57 & -4 & 22 & -73 & 24 & -12 \\ 31 & 28 & 5 & -6 & 35 & -7 & 0 \\ -16 & -15 & -5 & -2 & -16 & -3 & 5 \\ -10 & -9 & -6 & -3 & -9 & -3 & 6 \\ 28 & 27 & 0 & -14 & 35 & -15 & 10 \\ -11 & -10 & -2 & 1 & -12 & 1 & 1 \\ -40 & -37 & -10 & 3 & -43 & 3 & 5 \end{pmatrix}$$

.407

$$A = \begin{pmatrix} 13 & 4 & 16 & 1 & -26 & 23 & -10 \\ -4 & 2 & -8 & 3 & 7 & -6 & 8 \\ 10 & 5 & 10 & 1 & -20 & 18 & -5 \\ -3 & 0 & -4 & 1 & 5 & -4 & 4 \\ 0 & 4 & -4 & 4 & -1 & 1 & 6 \\ -8 & 0 & -12 & 2 & 15 & -13 & 10 \\ 12 & 2 & 16 & -1 & -23 & 20 & -12 \end{pmatrix}$$

.408

$$A = \begin{pmatrix} 0 & -1 & 19 & 17 & -6 & -11 & 14 \\ -1 & 3 & -1 & 0 & 2 & 2 & 6 \\ 0 & -3 & -41 & -39 & 10 & 21 & -39 \\ 2 & 1 & 11 & 11 & -2 & -5 & 9 \\ -3 & 10 & -12 & -7 & 8 & 11 & 9 \\ 3 & -12 & -32 & -34 & 3 & 12 & -50 \\ -1 & -2 & 12 & 10 & -5 & -8 & 7 \end{pmatrix}$$

.409

$$A = \begin{pmatrix} 12 & -17 & -13 & -9 & -3 & 2 & -10 \\ -66 & 60 & -9 & -39 & -42 & -54 & -33 \\ 34 & -32 & 2 & 18 & 20 & 27 & 15 \\ 141 & -135 & 1 & 69 & 79 & 109 & 56 \\ -102 & 101 & 6 & -40 & -51 & -74 & -31 \\ -96 & 94 & 4 & -38 & -49 & -69 & -29 \\ -33 & 29 & -6 & -26 & -24 & -31 & -23 \end{pmatrix}$$

.410

$$A = \begin{pmatrix} -16 & 15 & -5 & -29 & 13 & 15 & 8 \\ -2 & 4 & -2 & -9 & 3 & 4 & 2 \\ -28 & 22 & -6 & -40 & 20 & 22 & 12 \\ 16 & -9 & 1 & 15 & -9 & -9 & -5 \\ -65 & 54 & -17 & -103 & 49 & 55 & 30 \\ 82 & -66 & 17 & 129 & -59 & -66 & -34 \\ -54 & 39 & -8 & -74 & 36 & 39 & 20 \end{pmatrix}$$

.411

$$A = \begin{pmatrix} 4 & -2 & 1 & 5 & -6 & -6 & 6 \\ 31 & -23 & 9 & 39 & -44 & -39 & 40 \\ 4 & -2 & 1 & 5 & -6 & -6 & 6 \\ 43 & -32 & 12 & 53 & -61 & -54 & 56 \\ 16 & -11 & 4 & 19 & -23 & -21 & 22 \\ 94 & -64 & 25 & 113 & -132 & -122 & 126 \\ 81 & -55 & 21 & 97 & -115 & -106 & 110 \end{pmatrix}$$

.412

$$A = \begin{pmatrix} -33 & 9 & 2 & -9 & 6 & 50 & 53 \\ 5 & -19 & -9 & -4 & 8 & 17 & -2 \\ 17 & 1 & 3 & 7 & -5 & -34 & -29 \\ -1 & 17 & 6 & 3 & -10 & -18 & -3 \\ -3 & -21 & -10 & -7 & 12 & 34 & 12 \\ 20 & -7 & -2 & 5 & -3 & -29 & -32 \\ -41 & 21 & 8 & -8 & 3 & 49 & 63 \end{pmatrix}$$

.413

$$A = \begin{pmatrix} 13 & 62 & -2 & 0 & -28 & 5 & 32 \\ 55 & 34 & -42 & 35 & 11 & 66 & 32 \\ 49 & 57 & -34 & 25 & -5 & 54 & 39 \\ 38 & 35 & -27 & 23 & 1 & 43 & 28 \\ 59 & 20 & -48 & 40 & 21 & 75 & 26 \\ -12 & -24 & 6 & -6 & 7 & -10 & -16 \\ -55 & -66 & 37 & -30 & 7 & -59 & -47 \end{pmatrix}$$

.414

$$A = \begin{pmatrix} -72 & -25 & -117 & 57 & 23 & -79 & -52 \\ -30 & -2 & -29 & 12 & -8 & -13 & 9 \\ 66 & 26 & 116 & -57 & -29 & 81 & 61 \\ 15 & 13 & 46 & -24 & -24 & 37 & 43 \\ 126 & 39 & 194 & -93 & -31 & 128 & 75 \\ -6 & -3 & -12 & 6 & 4 & -9 & -8 \\ 48 & 12 & 71 & -33 & -9 & 44 & 22 \end{pmatrix}$$

.415

$$A = \begin{pmatrix} -13 & 51 & 3 & 23 & -9 & 4 & -8 \\ -9 & 11 & -5 & 9 & 22 & -16 & -15 \\ -5 & 14 & -3 & 10 & 17 & -10 & -10 \\ 19 & -31 & 9 & -24 & -50 & 35 & 33 \\ -1 & -6 & -4 & 1 & 21 & -13 & -8 \\ -6 & 25 & -1 & 15 & 14 & -8 & -10 \\ 19 & -82 & -4 & -40 & 1 & 0 & 16 \end{pmatrix}$$

.416

$$A = \begin{pmatrix} -28 & 31 & -2 & 49 & 41 & -20 & -40 \\ -3 & 14 & 11 & 11 & 2 & -6 & 2 \\ 82 & -32 & 49 & -112 & -128 & 47 & 127 \\ -74 & 2 & -70 & 86 & 120 & -34 & -127 \\ 45 & 2 & 45 & -51 & -74 & 20 & 78 \\ 23 & -33 & -6 & -45 & -33 & 19 & 29 \\ -42 & 11 & -29 & 55 & 67 & -23 & -66 \end{pmatrix}$$

.417

$$A = \begin{pmatrix} -46 & -98 & -104 & 28 & -78 & 12 & -98 \\ 1 & 5 & 13 & -3 & 6 & -3 & 5 \\ -9 & -20 & -22 & 6 & -16 & 2 & -20 \\ 4 & 5 & 0 & 0 & 3 & -1 & 5 \\ -13 & -31 & -36 & 10 & -25 & 2 & -31 \\ -18 & -40 & -44 & 12 & -32 & 4 & -40 \\ 40 & 84 & 83 & -23 & 65 & -7 & 84 \end{pmatrix}$$

.418

$$A = \begin{pmatrix} 0 & 7 & 0 & -6 & -4 & -5 & 8 \\ 0 & 7 & 0 & -6 & -4 & -5 & 8 \\ 10 & -163 & 2 & 136 & 91 & 113 & -185 \\ 0 & -7 & 0 & 6 & 4 & 5 & -8 \\ 3 & -10 & 1 & 8 & 6 & 6 & -12 \\ 8 & -87 & 2 & 72 & 49 & 59 & -99 \\ 7 & -70 & 2 & 58 & 40 & 47 & -80 \end{pmatrix}$$

.419

$$A = \begin{pmatrix} -39 & 23 & -3 & 11 & -11 & 10 & 12 \\ -178 & 143 & -109 & -60 & -111 & -14 & -34 \\ -123 & 111 & -105 & -76 & -96 & -29 & -51 \\ 33 & -31 & 31 & 23 & 27 & 10 & 16 \\ -89 & 79 & -73 & -51 & -67 & -19 & -34 \\ -30 & 20 & -8 & 2 & -12 & 4 & 4 \\ 96 & -87 & 83 & 61 & 76 & 23 & 41 \end{pmatrix}$$

.420

$$A = \begin{pmatrix} -15 & 6 & 7 & -1 & -15 & -5 & 5 \\ 31 & -14 & -16 & 0 & 34 & 10 & -7 \\ -21 & 9 & 9 & -2 & -21 & -8 & 6 \\ 33 & -12 & -17 & 1 & 33 & 9 & -13 \\ 17 & -7 & -9 & 0 & 18 & 5 & -5 \\ 6 & -3 & -3 & 0 & 7 & 2 & -1 \\ 10 & -5 & -4 & 1 & 10 & 5 & -1 \end{pmatrix}$$

תרגיל 2 (בסיס ז'ורדן למטריצות כלליות). עבור כל אחת מהמטריצות A הבאות, מיצאו מטריצה P הפיכה עבורה $P^{-1}AP$ מטריצת ז'ורדן, ומיצאו את צורת ז'ורדן של A.
נתון כי כל הערכים העצמיים של A שלמים.

.1

$$A = \begin{pmatrix} -60 & 30 \\ -90 & 45 \end{pmatrix}$$

.2

$$A = \begin{pmatrix} -14 & 0 \\ 15 & -9 \end{pmatrix}$$

.3

$$A = \begin{pmatrix} -2 & 0 \\ 10 & 8 \end{pmatrix}$$

.4

$$A = \begin{pmatrix} 18 & 0 \\ 13 & 5 \end{pmatrix}$$

.5

$$A = \begin{pmatrix} 32 & -15 \\ 90 & -43 \end{pmatrix}$$

.6

$$A = \begin{pmatrix} 14 & 0 \\ -12 & 18 \end{pmatrix}$$

.7

$$A = \begin{pmatrix} -23 & 17 \\ -34 & 28 \end{pmatrix}$$

.8

$$A = \begin{pmatrix} -8 & 0 \\ 1 & -8 \end{pmatrix}$$

.9

$$A = \begin{pmatrix} 5 & -2 \\ 0 & 4 \end{pmatrix}$$

.10

$$A = \begin{pmatrix} 0 & -1 \\ 1 & -2 \end{pmatrix}$$

.11

$$A = \begin{pmatrix} -5 & -1 \\ 4 & -9 \end{pmatrix}$$

.12

$$A = \begin{pmatrix} -16 & 4 \\ 0 & -12 \end{pmatrix}$$

.13

$$A = \begin{pmatrix} -7 & 0 \\ -1 & -7 \end{pmatrix}$$

.14

$$A = \begin{pmatrix} -11 & -1 \\ 1 & -13 \end{pmatrix}$$

.15

$$A = \begin{pmatrix} 7 & -1 \\ 0 & 7 \end{pmatrix}$$

.16

$$A = \begin{pmatrix} 3 & -1 \\ 1 & 5 \end{pmatrix}$$

.17

$$A = \begin{pmatrix} 2 & -1 \\ 1 & 4 \end{pmatrix}$$

.18

$$A = \begin{pmatrix} 18 & 108 \\ 0 & -18 \end{pmatrix}$$

.19

$$A = \begin{pmatrix} 6 & -1 \\ 0 & 6 \end{pmatrix}$$

.20

$$A = \begin{pmatrix} 4 & -4 \\ 1 & 0 \end{pmatrix}$$

.21

$$A = \begin{pmatrix} 20 & 8 & 2 \\ -1 & 14 & -1 \\ 1 & 2 & 17 \end{pmatrix}$$

.22

$$A = \begin{pmatrix} 83 & 91 & 41 \\ -66 & -74 & -30 \\ -66 & -66 & -38 \end{pmatrix}$$

.23

$$A = \begin{pmatrix} 0 & 0 & -1 \\ 6 & -6 & 5 \\ 0 & 0 & 0 \end{pmatrix}$$

.24

$$A = \begin{pmatrix} -18 & -2 & 4 \\ 0 & -20 & 0 \\ -1 & 1 & -22 \end{pmatrix}$$

.25

$$A = \begin{pmatrix} -3 & 0 & 0 \\ -36 & 16 & 1 \\ 38 & 0 & 16 \end{pmatrix}$$

.26

$$A = \begin{pmatrix} 14 & -16 & -16 \\ -52 & 98 & 88 \\ 76 & -124 & -114 \end{pmatrix}$$

.27

$$A = \begin{pmatrix} -23 & -16 & 0 \\ 48 & 21 & -12 \\ -48 & -24 & 9 \end{pmatrix}$$

.28

$$A = \begin{pmatrix} -5 & 2 & 5 \\ 0 & -3 & 4 \\ 0 & -1 & -7 \end{pmatrix}$$

.29

$$A = \begin{pmatrix} -4 & -11 & 2 \\ 10 & 17 & -2 \\ -20 & -14 & 14 \end{pmatrix}$$

.30

$$A = \begin{pmatrix} -18 & 1 & 1 \\ 3 & -18 & 2 \\ -2 & -2 & -21 \end{pmatrix}$$

.31

$$A = \begin{pmatrix} -5 & -42 & 42 \\ 30 & -137 & 122 \\ 30 & -118 & 103 \end{pmatrix}$$

.32

$$A = \begin{pmatrix} -17 & 2 & -1 \\ 0 & -17 & 0 \\ 0 & 0 & -17 \end{pmatrix}$$

.33

$$A = \begin{pmatrix} 17 & 0 & -9 \\ 2 & 14 & -6 \\ 1 & 0 & 11 \end{pmatrix}$$

.34

$$A = \begin{pmatrix} 5 & 1 & 0 \\ 2 & 9 & -1 \\ 1 & 9 & 4 \end{pmatrix}$$

.35

$$A = \begin{pmatrix} 0 & 0 & 6 \\ 0 & 0 & 10 \\ 0 & 0 & -2 \end{pmatrix}$$

.36

$$A = \begin{pmatrix} 116 & -144 & -48 \\ 64 & -84 & -24 \\ 64 & -80 & -28 \end{pmatrix}$$

.37

$$A = \begin{pmatrix} 10 & -33 & -27 \\ 0 & -8 & -2 \\ 0 & 3 & -13 \end{pmatrix}$$

.38

$$A = \begin{pmatrix} -7 & 9 & 3 \\ -2 & -16 & -1 \\ -6 & -9 & -16 \end{pmatrix}$$

.39

$$A = \begin{pmatrix} 5 & -11 & -49 \\ 0 & 16 & 81 \\ 0 & 0 & -11 \end{pmatrix}$$

.40

$$A = \begin{pmatrix} -6 & -2 & -1 \\ 0 & -7 & 0 \\ 1 & -2 & -8 \end{pmatrix}$$

.41

$$A = \begin{pmatrix} 20 & 60 & -60 \\ 0 & -20 & 40 \\ 0 & -20 & 40 \end{pmatrix}$$

.42

$$A = \begin{pmatrix} -14 & 0 & 0 \\ 10 & -4 & 0 \\ -34 & 0 & 20 \end{pmatrix}$$

.43

$$A = \begin{pmatrix} 9 & 0 & -1 \\ 1 & 10 & 1 \\ 1 & 0 & 11 \end{pmatrix}$$

.44

$$A = \begin{pmatrix} 4 & -4 & 1 \\ 7 & 9 & -7 \\ 2 & -4 & 3 \end{pmatrix}$$

.45

$$A = \begin{pmatrix} 53 & -66 & 0 \\ 44 & -57 & 0 \\ 132 & -198 & 9 \end{pmatrix}$$

.46

$$A = \begin{pmatrix} 17 & -1 & 0 \\ 4 & 13 & 0 \\ -2 & 1 & 15 \end{pmatrix}$$

.47

$$A = \begin{pmatrix} 61 & -19 & 24 \\ 0 & 18 & 0 \\ -144 & 67 & -59 \end{pmatrix}$$

.48

$$A = \begin{pmatrix} -59 & -1 & 34 \\ 69 & 11 & -34 \\ -104 & -2 & 61 \end{pmatrix}$$

.49

$$A = \begin{pmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ -2 & 1 & 0 \end{pmatrix}$$

.50

$$A = \begin{pmatrix} -2 & -1 & -2 \\ 2 & -5 & -3 \\ -1 & 1 & -2 \end{pmatrix}$$

.51

$$A = \begin{pmatrix} -114 & -54 & -54 \\ 60 & 24 & 30 \\ 144 & 72 & 66 \end{pmatrix}$$

.52

$$A = \begin{pmatrix} -61 & 76 & 2 \\ -58 & 73 & 2 \\ -38 & 38 & 16 \end{pmatrix}$$

.53

$$A = \begin{pmatrix} -15 & 20 & -9 \\ -2 & -33 & 7 \\ -5 & -23 & -9 \end{pmatrix}$$

.54

$$A = \begin{pmatrix} 6 & 8 & -17 \\ 1 & -1 & 13 \\ 1 & 1 & 11 \end{pmatrix}$$

.55

$$A = \begin{pmatrix} 33 & 0 & 18 \\ 14 & 15 & 14 \\ -20 & 0 & -5 \end{pmatrix}$$

.56

$$A = \begin{pmatrix} 6 & 10 & 12 \\ 0 & 16 & 0 \\ -6 & 6 & 24 \end{pmatrix}$$

.57

$$A = \begin{pmatrix} 10 & 0 & 24 \\ 10 & 0 & 38 \\ 0 & 0 & -14 \end{pmatrix}$$

.58

$$A = \begin{pmatrix} -144 & 152 & -78 \\ -102 & 103 & -63 \\ 68 & -70 & 40 \end{pmatrix}$$

.59

$$A = \begin{pmatrix} 6 & 0 & -23 \\ 0 & 20 & 37 \\ 0 & 0 & -17 \end{pmatrix}$$

.60

$$A = \begin{pmatrix} 14 & 3 & 9 \\ -6 & 23 & 18 \\ 1 & -1 & 14 \end{pmatrix}$$

.61

$$A = \begin{pmatrix} 15 & 0 & 27 \\ -9 & -12 & -9 \\ -30 & 0 & -42 \end{pmatrix}$$

.62

$$A = \begin{pmatrix} 0 & 7 & -9 \\ 6 & -3 & 11 \\ 9 & -12 & 21 \end{pmatrix}$$

.63

$$A = \begin{pmatrix} -1 & 0 & 17 \\ 0 & -1 & -17 \\ 0 & 0 & -18 \end{pmatrix}$$

.64

$$A = \begin{pmatrix} -2 & -84 & 100 \\ 0 & -44 & 50 \\ 0 & -25 & 31 \end{pmatrix}$$

.65

$$A = \begin{pmatrix} -13 & 7 & 9 \\ -1 & -5 & 9 \\ 1 & -5 & -18 \end{pmatrix}$$

.66

$$A = \begin{pmatrix} 8 & 0 & 0 \\ 20 & 13 & 5 \\ 20 & 0 & 18 \end{pmatrix}$$

.67

$$A = \begin{pmatrix} 3 & 27 & 1 \\ 0 & -5 & 0 \\ -1 & 27 & 5 \end{pmatrix}$$

.68

$$A = \begin{pmatrix} -9 & 19 & -19 \\ -26 & 29 & -12 \\ -26 & 19 & -2 \end{pmatrix}$$

.69

$$A = \begin{pmatrix} -3 & -6 & 4 \\ -3 & -7 & -2 \\ -12 & 11 & -17 \end{pmatrix}$$

.70

$$A = \begin{pmatrix} 17 & 0 & 0 \\ -8 & 9 & 8 \\ -4 & -4 & 21 \end{pmatrix}$$

.71

$$A = \begin{pmatrix} 0 & 4 & 4 \\ -1 & -3 & -1 \\ 0 & -1 & -3 \end{pmatrix}$$

.72

$$A = \begin{pmatrix} -3 & -4 & 20 \\ 1 & 1 & -10 \\ 0 & 0 & -11 \end{pmatrix}$$

.73

$$A = \begin{pmatrix} -10 & 0 & 0 \\ 0 & -10 & 0 \\ 1 & 0 & -10 \end{pmatrix}$$

.74

$$A = \begin{pmatrix} 53 & 0 & -38 \\ -95 & 15 & 95 \\ 57 & 0 & -42 \end{pmatrix}$$

.75

$$A = \begin{pmatrix} 12 & -1 & 1 \\ 0 & 11 & 1 \\ 0 & -1 & 13 \end{pmatrix}$$

.76

$$A = \begin{pmatrix} -10 & 0 & 0 \\ -39 & -19 & 30 \\ -51 & -15 & 26 \end{pmatrix}$$

.77

$$A = \begin{pmatrix} -2 & 10 & -8 \\ 9 & -3 & 8 \\ 18 & -30 & 28 \end{pmatrix}$$

.78

$$A = \begin{pmatrix} -32 & -14 & -24 \\ 52 & 34 & 24 \\ 26 & 14 & 18 \end{pmatrix}$$

.79

$$A = \begin{pmatrix} -5 & -3 & 9 \\ 6 & -14 & 9 \\ -2 & 1 & -14 \end{pmatrix}$$

.80

$$A = \begin{pmatrix} -113 & 148 & 123 \\ -18 & 37 & 17 \\ -91 & 107 & 102 \end{pmatrix}$$

.81

$$A = \begin{pmatrix} -10 & 3 & 0 \\ 0 & -10 & 0 \\ 0 & -1 & -10 \end{pmatrix}$$

.82

$$A = \begin{pmatrix} -15 & 1 & 0 \\ 0 & -16 & 1 \\ -1 & -1 & -17 \end{pmatrix}$$

.83

$$A = \begin{pmatrix} 29 & 3 & 18 \\ -27 & 7 & -28 \\ -12 & -2 & -1 \end{pmatrix}$$

.84

$$A = \begin{pmatrix} -2 & -6 & 9 \\ 0 & -8 & 9 \\ 0 & -4 & 4 \end{pmatrix}$$

.85

$$A = \begin{pmatrix} 18 & -22 & 4 \\ 0 & -4 & 4 \\ 0 & 0 & -8 \end{pmatrix}$$

.86

$$A = \begin{pmatrix} -64 & -66 & 68 \\ 46 & 49 & -46 \\ 2 & 3 & 2 \end{pmatrix}$$

.87

$$A = \begin{pmatrix} 9 & 0 & 0 \\ -20 & 16 & 1 \\ 8 & -1 & 14 \end{pmatrix}$$

.88

$$A = \begin{pmatrix} 16 & -11 & -10 \\ 21 & -16 & -10 \\ 41 & -21 & -25 \end{pmatrix}$$

.89

$$A = \begin{pmatrix} 14 & -2 & -1 \\ 6 & 15 & -3 \\ -5 & -2 & 16 \end{pmatrix}$$

.90

$$A = \begin{pmatrix} 43 & 4 & -44 \\ -16 & -5 & 15 \\ 60 & 4 & -61 \end{pmatrix}$$

.91

$$A = \begin{pmatrix} -53 & 68 & -1 \\ -36 & 51 & -1 \\ 140 & -136 & 19 \end{pmatrix}$$

.92

$$A = \begin{pmatrix} 5 & -16 & -12 \\ 27 & -37 & -18 \\ -7 & 6 & -9 \end{pmatrix}$$

.93

$$A = \begin{pmatrix} 13 & 0 & 33 \\ 0 & 3 & 1 \\ 0 & 0 & 2 \end{pmatrix}$$

.94

$$A = \begin{pmatrix} 48 & 0 & 28 \\ 171 & -11 & 78 \\ -56 & 0 & -36 \end{pmatrix}$$

.95

$$A = \begin{pmatrix} -1 & 4 & 8 \\ 24 & 3 & 24 \\ -24 & -12 & -33 \end{pmatrix}$$

.96

$$A = \begin{pmatrix} -63 & 72 & -11 \\ -48 & 57 & -11 \\ 0 & 0 & -2 \end{pmatrix}$$

.97

$$A = \begin{pmatrix} -10 & 0 & 9 \\ -5 & -7 & 15 \\ -1 & 0 & -4 \end{pmatrix}$$

.98

$$A = \begin{pmatrix} -25 & 9 & 5 \\ -3 & -14 & 2 \\ -8 & 9 & -12 \end{pmatrix}$$

.99

$$A = \begin{pmatrix} 18 & 2 & 1 \\ -17 & -1 & -9 \\ 24 & 23 & 28 \end{pmatrix}$$

.100

$$A = \begin{pmatrix} 16 & 0 & 0 \\ 52 & -10 & 0 \\ 52 & -26 & 16 \end{pmatrix}$$

.101

$$A = \begin{pmatrix} 6 & 0 & -8 \\ -5 & 2 & 10 \\ 2 & 0 & -2 \end{pmatrix}$$

.102

$$A = \begin{pmatrix} -151 & 106 & 108 \\ -162 & 116 & 111 \\ -51 & 34 & 42 \end{pmatrix}$$

.103

$$A = \begin{pmatrix} -2 & 1 & -1 \\ 0 & -1 & 0 \\ 1 & -1 & 0 \end{pmatrix}$$

.104

$$A = \begin{pmatrix} -9 & -3 & 2 \\ 5 & -17 & 3 \\ 4 & -4 & -10 \end{pmatrix}$$

.105

$$A = \begin{pmatrix} -8 & 0 & -12 \\ 0 & -8 & 48 \\ 0 & 0 & -20 \end{pmatrix}$$

.106

$$A = \begin{pmatrix} 9 & -17 & -23 \\ 0 & -8 & -23 \\ 0 & 0 & 15 \end{pmatrix}$$

.107

$$A = \begin{pmatrix} 9 & -27 & -27 \\ 2 & 24 & 6 \\ 1 & 3 & 21 \end{pmatrix}$$

.108

$$A = \begin{pmatrix} 14 & -17 & 0 \\ 0 & -3 & 0 \\ 0 & 0 & 14 \end{pmatrix}$$

.109

$$A = \begin{pmatrix} 33 & 0 & 24 \\ 8 & 9 & 8 \\ -32 & 0 & -23 \end{pmatrix}$$

.110

$$A = \begin{pmatrix} 17 & 0 & -25 \\ 0 & 17 & -25 \\ 0 & 0 & -8 \end{pmatrix}$$

.111

$$A = \begin{pmatrix} 6 & -42 & 0 \\ 0 & -8 & 0 \\ 0 & 42 & 6 \end{pmatrix}$$

.112

$$A = \begin{pmatrix} -9 & 2 & -1 \\ 0 & -12 & 0 \\ 9 & 6 & -15 \end{pmatrix}$$

.113

$$A = \begin{pmatrix} -38 & 24 & -22 \\ 22 & -25 & 16 \\ 64 & -51 & 39 \end{pmatrix}$$

.114

$$A = \begin{pmatrix} 46 & 0 & 26 \\ 52 & -11 & 21 \\ -52 & 0 & -32 \end{pmatrix}$$

.115

$$A = \begin{pmatrix} 34 & -18 & 18 \\ 0 & -7 & 0 \\ -27 & 4 & -11 \end{pmatrix}$$

.116

$$A = \begin{pmatrix} 0 & 1 & -2 \\ -1 & 2 & -1 \\ 2 & -1 & 4 \end{pmatrix}$$

.117

$$A = \begin{pmatrix} -14 & 5 & 18 \\ -1 & -19 & -5 \\ -1 & -2 & -21 \end{pmatrix}$$

.118

$$A = \begin{pmatrix} 7 & 1 & 0 \\ -3 & 4 & 1 \\ 1 & 0 & 4 \end{pmatrix}$$

.119

$$A = \begin{pmatrix} 18 & -12 & 2 \\ 5 & 2 & 1 \\ 4 & -8 & 12 \end{pmatrix}$$

.120

$$A = \begin{pmatrix} -15 & -159 & -74 \\ 0 & 20 & 18 \\ 0 & -27 & -25 \end{pmatrix}$$

.121

$$A = \begin{pmatrix} 43 & -52 & -39 & -78 \\ 26 & -35 & 0 & -78 \\ 0 & 0 & 4 & 0 \\ 0 & 0 & -13 & 17 \end{pmatrix}$$

.122

$$A = \begin{pmatrix} -23 & -23 & -44 & 31 \\ -38 & -14 & -49 & 37 \\ 51 & 34 & 77 & -49 \\ 8 & 5 & 10 & 4 \end{pmatrix}$$

.123

$$A = \begin{pmatrix} -2 & 1 & 2 & 0 \\ -1 & -4 & -1 & 0 \\ -2 & -1 & -6 & 0 \\ 1 & 1 & 1 & -4 \end{pmatrix}$$

.124

$$A = \begin{pmatrix} 12 & 3 & 2 & 2 \\ -3 & 18 & 2 & 2 \\ 0 & 0 & 15 & 0 \\ 0 & 0 & 0 & 15 \end{pmatrix}$$

.125

$$A = \begin{pmatrix} 7 & -4 & 6 & -14 \\ 4 & -1 & 5 & -11 \\ -9 & 6 & -9 & 24 \\ -3 & 2 & -4 & 11 \end{pmatrix}$$

.126

$$A = \begin{pmatrix} 81 & 66 & 68 & 2 \\ -84 & -69 & -68 & -2 \\ -18 & -17 & -21 & -1 \\ -82 & -49 & -66 & -20 \end{pmatrix}$$

.127

$$A = \begin{pmatrix} 62 & 53 & 30 & -56 \\ -84 & -46 & -88 & 86 \\ -44 & 0 & -94 & 59 \\ -4 & 40 & -88 & 26 \end{pmatrix}$$

.128

$$A = \begin{pmatrix} 8 & 3 & 3 & -5 \\ 0 & 51 & 69 & 63 \\ 0 & -46 & -64 & -47 \\ 0 & 0 & 0 & -3 \end{pmatrix}$$

.129

$$A = \begin{pmatrix} 32 & -68 & 32 & 24 \\ 22 & -58 & 28 & 24 \\ -1 & 1 & 14 & 0 \\ 23 & -71 & 26 & 36 \end{pmatrix}$$

.130

$$A = \begin{pmatrix} 7 & 2 & 0 & 4 \\ -4 & 1 & 0 & -4 \\ 0 & 1 & 3 & -1 \\ -2 & -1 & 0 & 1 \end{pmatrix}$$

.131

$$A = \begin{pmatrix} 12 & 0 & 0 & 0 \\ 65 & 17 & -66 & 101 \\ -48 & 0 & -16 & 4 \\ -52 & 0 & 0 & -14 \end{pmatrix}$$

.132

$$A = \begin{pmatrix} 8 & 123 & 119 & 117 \\ -2 & -77 & -79 & -78 \\ -2 & -3 & 3 & 0 \\ 4 & 71 & 67 & 69 \end{pmatrix}$$

.133

$$A = \begin{pmatrix} -7 & -10 & 0 & 11 \\ -1 & -16 & 0 & 7 \\ 0 & -9 & -8 & 9 \\ -1 & 1 & 0 & -10 \end{pmatrix}$$

.134

$$A = \begin{pmatrix} 2 & 0 & 0 & 0 \\ 1 & 2 & 5 & 7 \\ 2 & 0 & 1 & 1 \\ -2 & 0 & -1 & -1 \end{pmatrix}$$

.135

$$A = \begin{pmatrix} -7 & 1 & 129 & -64 \\ -1 & -9 & -66 & 33 \\ 0 & 0 & 12 & -10 \\ 0 & 0 & 60 & -38 \end{pmatrix}$$

.136

$$A = \begin{pmatrix} 17 & 28 & 12 & 0 \\ 0 & 3 & 1 & 0 \\ 0 & 0 & 3 & 0 \\ 0 & 42 & 25 & 17 \end{pmatrix}$$

.137

$$A = \begin{pmatrix} -48 & -52 & 4 & 20 \\ 78 & 91 & -3 & -39 \\ 38 & 47 & -7 & -19 \\ 104 & 132 & -4 & -60 \end{pmatrix}$$

.138

$$A = \begin{pmatrix} 16 & -4 & 4 & 2 \\ -4 & 16 & 4 & 2 \\ -10 & -10 & 30 & 5 \\ 4 & 4 & -4 & 18 \end{pmatrix}$$

.139

$$A = \begin{pmatrix} -1 & -2 & -6 & 4 \\ -2 & -4 & 3 & -2 \\ -10 & 5 & 10 & -10 \\ -20 & 10 & 30 & -25 \end{pmatrix}$$

.140

$$A = \begin{pmatrix} 0 & -2 & 3 & 2 \\ 2 & 4 & -2 & -1 \\ -1 & -1 & 4 & 1 \\ -2 & -1 & 2 & 4 \end{pmatrix}$$

.141

$$A = \begin{pmatrix} -4 & 0 & 0 & 11 \\ 69 & 19 & 0 & -101 \\ -23 & 0 & 19 & 45 \\ 0 & 0 & 0 & -15 \end{pmatrix}$$

.142

$$A = \begin{pmatrix} -77 & 14 & 68 & -54 \\ -40 & 5 & 68 & -82 \\ -186 & 42 & 121 & -60 \\ -124 & 28 & 68 & -21 \end{pmatrix}$$

.143

$$A = \begin{pmatrix} 51 & 36 & -66 & -132 \\ -34 & -24 & 44 & 88 \\ 34 & 29 & -39 & -88 \\ 0 & 0 & 0 & 5 \end{pmatrix}$$

.144

$$A = \begin{pmatrix} -22 & -17 & 2 & 9 \\ 12 & 8 & -4 & -10 \\ 3 & 4 & -10 & -2 \\ 6 & 10 & -4 & -16 \end{pmatrix}$$

.145

$$A = \begin{pmatrix} 20 & -1 & 4 & -3 \\ -2 & 13 & 27 & -21 \\ 0 & 2 & 12 & 6 \\ 0 & 5 & -20 & 35 \end{pmatrix}$$

.146

$$A = \begin{pmatrix} -39 & 12 & -48 & -12 \\ -107 & 15 & -179 & -18 \\ 7 & 1 & 13 & -1 \\ -86 & 21 & -131 & -24 \end{pmatrix}$$

.147

$$A = \begin{pmatrix} -15 & 0 & 0 & 0 \\ 29 & -89 & 105 & 76 \\ 31 & -70 & 86 & 70 \\ -2 & 0 & 0 & -13 \end{pmatrix}$$

.148

$$A = \begin{pmatrix} -24 & -36 & -36 & -18 \\ -56 & -41 & -53 & -24 \\ 110 & 107 & 119 & 51 \\ -42 & -42 & -42 & -9 \end{pmatrix}$$

.149

$$A = \begin{pmatrix} -27 & 0 & -22 & -11 \\ 168 & -13 & 168 & 104 \\ -22 & 0 & -27 & -11 \\ 66 & 0 & 66 & 28 \end{pmatrix}$$

.150

$$A = \begin{pmatrix} -26 & -32 & 32 & 42 \\ 45 & 98 & -95 & -145 \\ -43 & -32 & 35 & 35 \\ 44 & 64 & -64 & -88 \end{pmatrix}$$

.151

$$A = \begin{pmatrix} 3 & 83 & -7 & 48 \\ -18 & 72 & -18 & 32 \\ -22 & -42 & -12 & -32 \\ 36 & -178 & 36 & -81 \end{pmatrix}$$

.152

$$A = \begin{pmatrix} 21 & -60 & -43 & 72 \\ -10 & 70 & 44 & -72 \\ -10 & 60 & 54 & -72 \\ -15 & 96 & 69 & -104 \end{pmatrix}$$

.153

$$A = \begin{pmatrix} 9 & -85 & 55 & 25 \\ 0 & -20 & 17 & 5 \\ 0 & -46 & 37 & 10 \\ 0 & 22 & -16 & -1 \end{pmatrix}$$

.154

$$A = \begin{pmatrix} 4 & 4 & 0 & 0 \\ 0 & 8 & 0 & 0 \\ -14 & -101 & -87 & -105 \\ 14 & 76 & 70 & 88 \end{pmatrix}$$

.155

$$A = \begin{pmatrix} -67 & -18 & 0 & -102 \\ -57 & -28 & -18 & -102 \\ -9 & 9 & 17 & 0 \\ 50 & 18 & 0 & 85 \end{pmatrix}$$

.156

$$A = \begin{pmatrix} -24 & 8 & 48 & 0 \\ -2 & -14 & 12 & 0 \\ -1 & 1 & -10 & 0 \\ 1 & -2 & -4 & -16 \end{pmatrix}$$

.157

$$A = \begin{pmatrix} 18 & 0 & 0 & 0 \\ -44 & 156 & -6 & -157 \\ -22 & 92 & -8 & -90 \\ -44 & 138 & -6 & -139 \end{pmatrix}$$

.158

$$A = \begin{pmatrix} 4 & -16 & -24 & 24 \\ 1 & -6 & -3 & 3 \\ 4 & -8 & -16 & 12 \\ 2 & -4 & -6 & 2 \end{pmatrix}$$

.159

$$A = \begin{pmatrix} -25 & 6 & 12 & 11 \\ -12 & -3 & 11 & 8 \\ 8 & -8 & -19 & -4 \\ -20 & 12 & 18 & 3 \end{pmatrix}$$

.160

$$A = \begin{pmatrix} 28 & -36 & 43 & -21 \\ 34 & -62 & 66 & -43 \\ 0 & 0 & -9 & 0 \\ -36 & 72 & -67 & 52 \end{pmatrix}$$

.161

$$A = \begin{pmatrix} 17 & 0 & 0 & 0 \\ 13 & 19 & -4 & -1 \\ 5 & 1 & 15 & 0 \\ 0 & 0 & 0 & 17 \end{pmatrix}$$

.162

$$A = \begin{pmatrix} -9 & -19 & 51 & 94 \\ 0 & -12 & 7 & 13 \\ 0 & 18 & -55 & -85 \\ 0 & -10 & 26 & 39 \end{pmatrix}$$

.163

$$A = \begin{pmatrix} 6 & 159 & -3 & -159 \\ 1 & -17 & 1 & 26 \\ 3 & -132 & 12 & 132 \\ 1 & 1 & 1 & 8 \end{pmatrix}$$

.164

$$A = \begin{pmatrix} -45 & -200 & -158 & 78 \\ 0 & 7 & 12 & -12 \\ 16 & 66 & 44 & -17 \\ 16 & 90 & 73 & -46 \end{pmatrix}$$

.165

$$A = \begin{pmatrix} -30 & 70 & -20 & -2 \\ 0 & -13 & 2 & 2 \\ 54 & -128 & 25 & -8 \\ -54 & 124 & -32 & 1 \end{pmatrix}$$

.166

$$A = \begin{pmatrix} -4 & 12 & 18 & 0 \\ -9 & 20 & 9 & 0 \\ -12 & 8 & 26 & 0 \\ 9 & -6 & -9 & 14 \end{pmatrix}$$

.167

$$A = \begin{pmatrix} -88 & 41 & -113 & -67 \\ -100 & 44 & -170 & -80 \\ 0 & 0 & 18 & 0 \\ 18 & -9 & 9 & 7 \end{pmatrix}$$

.168

$$A = \begin{pmatrix} -5 & 38 & -82 & -62 \\ 0 & -3 & -8 & -8 \\ 0 & -36 & 51 & 36 \\ 0 & 36 & -62 & -47 \end{pmatrix}$$

.169

$$A = \begin{pmatrix} -122 & -126 & 51 & 72 \\ 90 & 154 & -96 & -72 \\ 130 & 198 & -115 & -96 \\ -120 & -84 & 9 & 56 \end{pmatrix}$$

.170

$$A = \begin{pmatrix} 21 & -16 & 16 & -16 \\ 43 & -38 & 38 & -38 \\ 36 & -16 & 1 & -16 \\ 25 & -5 & -10 & -5 \end{pmatrix}$$

.171

$$A = \begin{pmatrix} 24 & 18 & -23 & 2 \\ -44 & -36 & 53 & -5 \\ -17 & -15 & 27 & -3 \\ -77 & -72 & 91 & -3 \end{pmatrix}$$

.172

$$A = \begin{pmatrix} 149 & -143 & -143 & 142 \\ 127 & -121 & -119 & 118 \\ -24 & 24 & 22 & -16 \\ -60 & 60 & 60 & -54 \end{pmatrix}$$

.173

$$A = \begin{pmatrix} 7 & 0 & -7 & 6 \\ 56 & -1 & -52 & 48 \\ 32 & 0 & -31 & 28 \\ 16 & 0 & -15 & 13 \end{pmatrix}$$

.174

$$A = \begin{pmatrix} -10 & 0 & 2 & 0 \\ 49 & -39 & -122 & 96 \\ 0 & 0 & -11 & 0 \\ 29 & -16 & -62 & 41 \end{pmatrix}$$

.175

$$A = \begin{pmatrix} 5 & -63 & 6 & -93 \\ 0 & -16 & 0 & -33 \\ 0 & 0 & 3 & -14 \\ 0 & 0 & 0 & 17 \end{pmatrix}$$

.176

$$A = \begin{pmatrix} -65 & 72 & 63 & 13 \\ -47 & 54 & 42 & 8 \\ -21 & 21 & 25 & 4 \\ -38 & 38 & 33 & 14 \end{pmatrix}$$

.177

$$A = \begin{pmatrix} -42 & -20 & 25 & 40 \\ -72 & -70 & 69 & 72 \\ -96 & -80 & 82 & 96 \\ -8 & -4 & 5 & 6 \end{pmatrix}$$

.178

$$A = \begin{pmatrix} -116 & 151 & 112 & 33 \\ -75 & 104 & 75 & 36 \\ -33 & 39 & 29 & -3 \\ 25 & -31 & -25 & -1 \end{pmatrix}$$

.179

$$A = \begin{pmatrix} -12 & 9 & 3 & -3 \\ -2 & -21 & -1 & 1 \\ -6 & -9 & -21 & 3 \\ 0 & 0 & 0 & -18 \end{pmatrix}$$

.180

$$A = \begin{pmatrix} -33 & 15 & 15 & 45 \\ 15 & -18 & -30 & -15 \\ -15 & 15 & 27 & 15 \\ -30 & 15 & 15 & 42 \end{pmatrix}$$

.181

$$A = \begin{pmatrix} 56 & -106 & -12 & 0 \\ 33 & -63 & -6 & 0 \\ 13 & -23 & -6 & 0 \\ 102 & -192 & -24 & 0 \end{pmatrix}$$

.182

$$A = \begin{pmatrix} 41 & -23 & 23 & -47 \\ 66 & -49 & 68 & -138 \\ -33 & 34 & -15 & 69 \\ -33 & 34 & -34 & 88 \end{pmatrix}$$

.183

$$A = \begin{pmatrix} 20 & 46 & 20 & 140 \\ -13 & -39 & -20 & -140 \\ 6 & 18 & 13 & 54 \\ -1 & 5 & 7 & 26 \end{pmatrix}$$

.184

$$A = \begin{pmatrix} -9 & -1 & 1 & -1 \\ 1 & -11 & 1 & -1 \\ 1 & -1 & -9 & -1 \\ 1 & -1 & 1 & -11 \end{pmatrix}$$

.185

$$A = \begin{pmatrix} 43 & -29 & -6 & 17 \\ -22 & 20 & 0 & -11 \\ 30 & -21 & -1 & 13 \\ -112 & 80 & 12 & -47 \end{pmatrix}$$

.186

$$A = \begin{pmatrix} -5 & 6 & -10 & -18 \\ 6 & 8 & 4 & 7 \\ 4 & -3 & 14 & 5 \\ 14 & -6 & 9 & 27 \end{pmatrix}$$

.187

$$A = \begin{pmatrix} 11 & 2 & 2 & -4 \\ 74 & -16 & -33 & 61 \\ -29 & 13 & 30 & -24 \\ 32 & -14 & -14 & 43 \end{pmatrix}$$

.188

$$A = \begin{pmatrix} 3 & 1 & -1 & 15 \\ 15 & 13 & 3 & -21 \\ 1 & -1 & 17 & -3 \\ -9 & 1 & -1 & 27 \end{pmatrix}$$

.189

$$A = \begin{pmatrix} -128 & -40 & 16 & -150 \\ 87 & 15 & -12 & 117 \\ -48 & -16 & -9 & -66 \\ 55 & 20 & -8 & 57 \end{pmatrix}$$

.190

$$A = \begin{pmatrix} -11 & 23 & 8 & 30 \\ 23 & 37 & 8 & 78 \\ -8 & -8 & -10 & -16 \\ -15 & -39 & -8 & -72 \end{pmatrix}$$

.191

$$A = \begin{pmatrix} -2 & 12 & 0 & -2 \\ -4 & -16 & 0 & 1 \\ 17 & -2 & -16 & -9 \\ 9 & 14 & 0 & -12 \end{pmatrix}$$

.192

$$A = \begin{pmatrix} 7 & 56 & -56 & -52 \\ 3 & -37 & 48 & 45 \\ 7 & -110 & 121 & 103 \\ -4 & 68 & -68 & -53 \end{pmatrix}$$

.193

$$A = \begin{pmatrix} -80 & -26 & -93 & -26 \\ -93 & -13 & -93 & -26 \\ 62 & 26 & 75 & 26 \\ 93 & 0 & 93 & 13 \end{pmatrix}$$

.194

$$A = \begin{pmatrix} -83 & 0 & -10 & 34 \\ -164 & -12 & -8 & 91 \\ 114 & 0 & 20 & -42 \\ -140 & 0 & -20 & 55 \end{pmatrix}$$

.195

$$A = \begin{pmatrix} 4 & 0 & 0 & 0 \\ -48 & 34 & 12 & -18 \\ 40 & -28 & 2 & 24 \\ -60 & 36 & 12 & -20 \end{pmatrix}$$

.196

$$A = \begin{pmatrix} -85 & -76 & 2 & 11 \\ 65 & 56 & -2 & -11 \\ 141 & 141 & 21 & 21 \\ -114 & -114 & -14 & -14 \end{pmatrix}$$

.197

$$A = \begin{pmatrix} -60 & -80 & 40 & 40 \\ 47 & 99 & -47 & -15 \\ 45 & 140 & -65 & 10 \\ -31 & -62 & 31 & 20 \end{pmatrix}$$

.198

$$A = \begin{pmatrix} 5 & -7 & -12 & -14 \\ 11 & 25 & 11 & 12 \\ -42 & -42 & -24 & -40 \\ 32 & 30 & 31 & 48 \end{pmatrix}$$

.199

$$A = \begin{pmatrix} -3 & 2 & -6 & 6 \\ 13 & -14 & 39 & -39 \\ 3 & -3 & 8 & -9 \\ -2 & 2 & -6 & 5 \end{pmatrix}$$

.200

$$A = \begin{pmatrix} 74 & -9 & 99 & 18 \\ 60 & -22 & 99 & 45 \\ -60 & 27 & -82 & -33 \\ 60 & -27 & 99 & 50 \end{pmatrix}$$

.201

$$A = \begin{pmatrix} 9 & -1 & 0 & 0 \\ 1 & 11 & 0 & 0 \\ 31 & 9 & -1 & 0 \\ 73 & 39 & -9 & 2 \end{pmatrix}$$

.202

$$A = \begin{pmatrix} 37 & 33 & 4 & -2 \\ -54 & -50 & -4 & 2 \\ -27 & -25 & -2 & 1 \\ 150 & 128 & 2 & -11 \end{pmatrix}$$

.203

$$A = \begin{pmatrix} -7 & 0 & 0 & 0 \\ 6 & -1 & -2 & -1 \\ -5 & 1 & 3 & 2 \\ 12 & -1 & -3 & -2 \end{pmatrix}$$

.204

$$A = \begin{pmatrix} -8 & -73 & -16 & -16 \\ 0 & 11 & 0 & 0 \\ 0 & 16 & 19 & 0 \\ 0 & -43 & -35 & -16 \end{pmatrix}$$

.205

$$A = \begin{pmatrix} -45 & -20 & -20 & 0 \\ 14 & -1 & 4 & -2 \\ 46 & 26 & 21 & 2 \\ -66 & -36 & -36 & -7 \end{pmatrix}$$

.206

$$A = \begin{pmatrix} 15 & 0 & 72 & 72 \\ 22 & 1 & 106 & 126 \\ -4 & 0 & -21 & -32 \\ 4 & 0 & 12 & 23 \end{pmatrix}$$

.207

$$A = \begin{pmatrix} -1 & 4 & 8 & -12 \\ 2 & 1 & -4 & 6 \\ -3 & 3 & 9 & -9 \\ 0 & 0 & 0 & 3 \end{pmatrix}$$

.208

$$A = \begin{pmatrix} -27 & 52 & 62 & 38 \\ 0 & -19 & -20 & 0 \\ 0 & 0 & 1 & 0 \\ -19 & 41 & 51 & 30 \end{pmatrix}$$

.209

$$A = \begin{pmatrix} 3 & -6 & 6 & -3 \\ 4 & 14 & -8 & 4 \\ 3 & 6 & 0 & 3 \\ 1 & 2 & -2 & 7 \end{pmatrix}$$

.210

$$A = \begin{pmatrix} -11 & 0 & 0 & 0 \\ -7 & -14 & 13 & 13 \\ 20 & -68 & 51 & 44 \\ -4 & 42 & -26 & -19 \end{pmatrix}$$

.211

$$A = \begin{pmatrix} -108 & 2 & 59 & 51 \\ -121 & 2 & 67 & 57 \\ -59 & 1 & 32 & 28 \\ -147 & 3 & 81 & 69 \end{pmatrix}$$

.212

$$A = \begin{pmatrix} -70 & -90 & 10 & 90 \\ -80 & -60 & 0 & 80 \\ -35 & -35 & 15 & 35 \\ -130 & -130 & 10 & 150 \end{pmatrix}$$

.213

$$A = \begin{pmatrix} -10 & 10 & 10 & 11 \\ 1 & -31 & -22 & -24 \\ 0 & 18 & 9 & 19 \\ -1 & -2 & -2 & -10 \end{pmatrix}$$

.214

$$A = \begin{pmatrix} 9 & 0 & 0 & 0 \\ 20 & 73 & -60 & 60 \\ 8 & 30 & -17 & 30 \\ -12 & -45 & 45 & -32 \end{pmatrix}$$

.215

$$A = \begin{pmatrix} -46 & -38 & -21 & -42 \\ 40 & 32 & 21 & 42 \\ -38 & 4 & -27 & -80 \\ 38 & 17 & 20 & 53 \end{pmatrix}$$

.216

$$A = \begin{pmatrix} -8 & 0 & 0 & 0 \\ -11 & 5 & -67 & 69 \\ 18 & 0 & -24 & 30 \\ 26 & 0 & -20 & 26 \end{pmatrix}$$

.217

$$A = \begin{pmatrix} -17 & -4 & -1 & 3 \\ 1 & -21 & 0 & 1 \\ -1 & 1 & -20 & -1 \\ -2 & 2 & 0 & -22 \end{pmatrix}$$

.218

$$A = \begin{pmatrix} -14 & -6 & -4 & 2 \\ -2 & -13 & -2 & -1 \\ 8 & 12 & -2 & -1 \\ 2 & 3 & 2 & -11 \end{pmatrix}$$

.219

$$A = \begin{pmatrix} 106 & -120 & -24 & 54 \\ 57 & -68 & -12 & 27 \\ 57 & -84 & 4 & 27 \\ -33 & 37 & 11 & -11 \end{pmatrix}$$

.220

$$A = \begin{pmatrix} 54 & 0 & 36 & -54 \\ 184 & -86 & 76 & -12 \\ 114 & -102 & 24 & 90 \\ 112 & -68 & 40 & 24 \end{pmatrix}$$

.221

$$A = \begin{pmatrix} 19 & 0 & -63 & 62 & 62 \\ -2 & 22 & -155 & 157 & 157 \\ 1 & -1 & 82 & -63 & -63 \\ -26 & 0 & 63 & -69 & -62 \\ 27 & -1 & 30 & -5 & -12 \end{pmatrix}$$

.222

$$A = \begin{pmatrix} -58 & 174 & 30 & -126 & -96 \\ -78 & 72 & 18 & 2 & -138 \\ -32 & 73 & 17 & -47 & -52 \\ -66 & 84 & 18 & -22 & -114 \\ -13 & -45 & -6 & 61 & -27 \end{pmatrix}$$

.223

$$A = \begin{pmatrix} 27 & -18 & -22 & -18 & 18 \\ 121 & -90 & -117 & -61 & 111 \\ -69 & 72 & 117 & 42 & -135 \\ 46 & -18 & -22 & -37 & 18 \\ -10 & 30 & 62 & 10 & -81 \end{pmatrix}$$

.224

$$A = \begin{pmatrix} -11 & 2 & -9 & 18 & -13 \\ 3 & -16 & 25 & -51 & 36 \\ 1 & -2 & -3 & -15 & 10 \\ -2 & 2 & -10 & 11 & -15 \\ -3 & 3 & -14 & 30 & -31 \end{pmatrix}$$

.225

$$A = \begin{pmatrix} -8 & 10 & -3 & -3 & 2 \\ -12 & 16 & 22 & -11 & 12 \\ -14 & 6 & 17 & -2 & 14 \\ -26 & 29 & 46 & -20 & 26 \\ 8 & -1 & -27 & 4 & -14 \end{pmatrix}$$

.226

$$A = \begin{pmatrix} -10 & -9 & -9 & 0 & -9 \\ -59 & -7 & -23 & -1 & -23 \\ -46 & -49 & -28 & 0 & -48 \\ 118 & 91 & 84 & 20 & 86 \\ 123 & 73 & 68 & 1 & 88 \end{pmatrix}$$

.227

$$A = \begin{pmatrix} 17 & -15 & 35 & 24 & -11 \\ 41 & -37 & 82 & 51 & -23 \\ 17 & -15 & 32 & 18 & -9 \\ -3 & 3 & -6 & -3 & 1 \\ 15 & -13 & 29 & 18 & -9 \end{pmatrix}$$

.228

$$A = \begin{pmatrix} 2 & -2 & -120 & 17 & -4 \\ 2 & -3 & -50 & 8 & -2 \\ 0 & 0 & -5 & 0 & 0 \\ 1 & -1 & -23 & 3 & -1 \\ 3 & -2 & -146 & 24 & -6 \end{pmatrix}$$

.229

$$A = \begin{pmatrix} -8 & -6 & -4 & 6 & 0 \\ 20 & 14 & 15 & -13 & 0 \\ 3 & 2 & 3 & -2 & 0 \\ 11 & 7 & 12 & -6 & 0 \\ -48 & -31 & -40 & 31 & 1 \end{pmatrix}$$

.230

$$A = \begin{pmatrix} -10 & -20 & -5 & 4 & -1 \\ 13 & 23 & -3 & 4 & 1 \\ -20 & -23 & 39 & -34 & -4 \\ -20 & -23 & 40 & -35 & -4 \\ 13 & 15 & -19 & 22 & 12 \end{pmatrix}$$

.231

$$A = \begin{pmatrix} 13 & -8 & -20 & 10 & 16 \\ -36 & 13 & 48 & -24 & -44 \\ 58 & -4 & -59 & 32 & 62 \\ 12 & 0 & -12 & 11 & 12 \\ 42 & 4 & -36 & 18 & 43 \end{pmatrix}$$

.232

$$A = \begin{pmatrix} 2 & -9 & -6 & 1 & 9 \\ -16 & -15 & 16 & -11 & 11 \\ 10 & -10 & -14 & 0 & 10 \\ 0 & 0 & 0 & -9 & 0 \\ -14 & -4 & 14 & -9 & 0 \end{pmatrix}$$

.233

$$A = \begin{pmatrix} 63 & 49 & -22 & 0 & -22 \\ -162 & -116 & 44 & 0 & 44 \\ -111 & -100 & 54 & 0 & 45 \\ -97 & -65 & 22 & -2 & 22 \\ -51 & -3 & -23 & 0 & -14 \end{pmatrix}$$

.234

$$A = \begin{pmatrix} 19 & -5 & -8 & 4 & 8 \\ 1 & 16 & -4 & 3 & 7 \\ 0 & 5 & 26 & -3 & -7 \\ -3 & 5 & 3 & 16 & -10 \\ 2 & -1 & 1 & 1 & 23 \end{pmatrix}$$

.235

$$A = \begin{pmatrix} 9 & 42 & 72 & 126 & -120 \\ 2 & 17 & 24 & 28 & -26 \\ -2 & -34 & -41 & -28 & 26 \\ 2 & 74 & 84 & 3 & 2 \\ 2 & 74 & 84 & 14 & -9 \end{pmatrix}$$

.236

$$A = \begin{pmatrix} 6 & 6 & 34 & -70 & -36 \\ 0 & 0 & 0 & 0 & 0 \\ -9 & -2 & -44 & 84 & 33 \\ 4 & 11 & -17 & 49 & 25 \\ -7 & -14 & 0 & -14 & -7 \end{pmatrix}$$

.237

$$A = \begin{pmatrix} 11 & -57 & -10 & -68 & -56 \\ 0 & 28 & 32 & 81 & 17 \\ 0 & -92 & 11 & -76 & -92 \\ 0 & 35 & -8 & 22 & 35 \\ 0 & -79 & -24 & -119 & -68 \end{pmatrix}$$

.238

$$A = \begin{pmatrix} 17 & 0 & 27 & 30 & 0 \\ -3 & 29 & -19 & -7 & -30 \\ 9 & 0 & 31 & 26 & 0 \\ -10 & 0 & -26 & -22 & 0 \\ -3 & 15 & -19 & -7 & -16 \end{pmatrix}$$

.239

$$A = \begin{pmatrix} 7 & -37 & 29 & -64 & 65 \\ -14 & 33 & -23 & 61 & -62 \\ 14 & -43 & 16 & -64 & 65 \\ -14 & -8 & -71 & 82 & -76 \\ -28 & 35 & -100 & 159 & -154 \end{pmatrix}$$

.240

$$A = \begin{pmatrix} -31 & -9 & 7 & 13 & -55 \\ -2 & -5 & 2 & 2 & -4 \\ -14 & -4 & -2 & 5 & -28 \\ 15 & 5 & -3 & -11 & 31 \\ 16 & 5 & -4 & -7 & 28 \end{pmatrix}$$

.241

$$A = \begin{pmatrix} -1 & -2 & 1 & -3 & -1 \\ 2 & -5 & 1 & -3 & -1 \\ 0 & 0 & -3 & 0 & 0 \\ 0 & 0 & 0 & -3 & 0 \\ 0 & 0 & 0 & 0 & -3 \end{pmatrix}$$

.242

$$A = \begin{pmatrix} -9 & 4 & -2 & 4 & 4 \\ 7 & -6 & -8 & 7 & 13 \\ -12 & -12 & -1 & -12 & -20 \\ -8 & -8 & 10 & -21 & -16 \\ -9 & -9 & 9 & -9 & -28 \end{pmatrix}$$

.243

$$A = \begin{pmatrix} 55 & 57 & -9 & 15 & 51 \\ -24 & -44 & 3 & -18 & -39 \\ 101 & 99 & -18 & 27 & 100 \\ 84 & 96 & -12 & 28 & 90 \\ -23 & -3 & 1 & 9 & -3 \end{pmatrix}$$

.244

$$A = \begin{pmatrix} -13 & -60 & 128 & 76 & 20 \\ 10 & 27 & -44 & -38 & -10 \\ 5 & 15 & -25 & -19 & -5 \\ -3 & -9 & 16 & 12 & 3 \\ -9 & -57 & 124 & 47 & 16 \end{pmatrix}$$

.245

$$A = \begin{pmatrix} -17 & 59 & -14 & -67 & -37 \\ 0 & -11 & 0 & -3 & -2 \\ -1 & 9 & -15 & -10 & -5 \\ 2 & -27 & 6 & 18 & 17 \\ -3 & 43 & -10 & -49 & -40 \end{pmatrix}$$

.246

$$A = \begin{pmatrix} -2 & 0 & 0 & 0 & 0 \\ -35 & 52 & 41 & 42 & -7 \\ 8 & -3 & 6 & -2 & 3 \\ 27 & -60 & -58 & -51 & 4 \\ -18 & 3 & 2 & 2 & 5 \end{pmatrix}$$

.247

$$A = \begin{pmatrix} -24 & 32 & 6 & 18 & 27 \\ -13 & 21 & 2 & 6 & 11 \\ 13 & -12 & 7 & -6 & -11 \\ -5 & 5 & 1 & 12 & 4 \\ -25 & 25 & 5 & 15 & 29 \end{pmatrix}$$

.248

$$A = \begin{pmatrix} -67 & -129 & 123 & -12 & 72 \\ -30 & -62 & 57 & -5 & 34 \\ -52 & -106 & 97 & -10 & 60 \\ 24 & 54 & -48 & 2 & -30 \\ -18 & -31 & 33 & -2 & 15 \end{pmatrix}$$

.249

$$A = \begin{pmatrix} 10 & 150 & -168 & -162 & 171 \\ 1 & 17 & -15 & -16 & 16 \\ -5 & -74 & 93 & 82 & -91 \\ -1 & -24 & 28 & 29 & -28 \\ -7 & -124 & 145 & 136 & -144 \end{pmatrix}$$

.250

$$A = \begin{pmatrix} 5 & -36 & 72 & 60 & -72 \\ -30 & 74 & -162 & -132 & 162 \\ 3 & -15 & 23 & 27 & -30 \\ 15 & -36 & 72 & 50 & -72 \\ 33 & -93 & 186 & 153 & -193 \end{pmatrix}$$

.251

$$A = \begin{pmatrix} -3 & 2 & 2 & 2 & -4 \\ -5 & -12 & -2 & -2 & 1 \\ 8 & 8 & -5 & 4 & 5 \\ -15 & -9 & -6 & -15 & 2 \\ 3 & 1 & 1 & 1 & -11 \end{pmatrix}$$

.252

$$A = \begin{pmatrix} -59 & -2 & -24 & 3 & 21 \\ 1 & 17 & 0 & -1 & 1 \\ 150 & 4 & 64 & -6 & -42 \\ -77 & -3 & -24 & 21 & 19 \\ -3 & -2 & 0 & 3 & 13 \end{pmatrix}$$

.253

$$A = \begin{pmatrix} -68 & 112 & 4 & 4 & -80 \\ -88 & 143 & 5 & 5 & -101 \\ -11 & 17 & 9 & -2 & -14 \\ 28 & -26 & 1 & 12 & 6 \\ -53 & 85 & 3 & 3 & -59 \end{pmatrix}$$

.254

$$A = \begin{pmatrix} 127 & 80 & 108 & -80 & 164 \\ -47 & -44 & -61 & 50 & -72 \\ -10 & 50 & 53 & -50 & 8 \\ -89 & -40 & -61 & 46 & -114 \\ -96 & -87 & -108 & 87 & -133 \end{pmatrix}$$

.255

$$A = \begin{pmatrix} 30 & -13 & 20 & 19 & -25 \\ 104 & -50 & 58 & 56 & -64 \\ 0 & 6 & 4 & 6 & -18 \\ 88 & -45 & 44 & 41 & -41 \\ 64 & -27 & 38 & 37 & -49 \end{pmatrix}$$

.256

$$A = \begin{pmatrix} -13 & 14 & 6 & -5 & 7 \\ -6 & -41 & -12 & 12 & -13 \\ -1 & -49 & -35 & 16 & -25 \\ -4 & -6 & -2 & -9 & -2 \\ 9 & 94 & 41 & -35 & 33 \end{pmatrix}$$

.257

$$A = \begin{pmatrix} -3 & 0 & 0 & 0 & 0 \\ 137 & 4 & -18 & 14 & -10 \\ -167 & 12 & 33 & -13 & 10 \\ -43 & 4 & 17 & -1 & 14 \\ 122 & -8 & -18 & 14 & 2 \end{pmatrix}$$

.258

$$A = \begin{pmatrix} 77 & 51 & -53 & -93 & -107 \\ -107 & -70 & 82 & 144 & 164 \\ -36 & -26 & 34 & 48 & 55 \\ 89 & 65 & -68 & -112 & -137 \\ -66 & -48 & 51 & 89 & 109 \end{pmatrix}$$

.259

$$A = \begin{pmatrix} -6 & -88 & -57 & -49 & 71 \\ 3 & -97 & -57 & -142 & 161 \\ 24 & 166 & 115 & 149 & -181 \\ 0 & 0 & 0 & -12 & 16 \\ 0 & 0 & 0 & -48 & 44 \end{pmatrix}$$

.260

$$A = \begin{pmatrix} 126 & -42 & 52 & 119 & 67 \\ -27 & -7 & -16 & -27 & -11 \\ 12 & -12 & 7 & 12 & 12 \\ -150 & 64 & -61 & -143 & -89 \\ 0 & -32 & -7 & 0 & 14 \end{pmatrix}$$

.261

$$A = \begin{pmatrix} 23 & -7 & 2 & -2 & 11 \\ 14 & -1 & 9 & -14 & 18 \\ -107 & 101 & -44 & 88 & -127 \\ -61 & 61 & -36 & 70 & -73 \\ 10 & -13 & 7 & -12 & 26 \end{pmatrix}$$

.262

$$A = \begin{pmatrix} 37 & -26 & 59 & -58 & -39 \\ -58 & 37 & -88 & 86 & 58 \\ -69 & 48 & -109 & 107 & 71 \\ -8 & 6 & -13 & 11 & 9 \\ -16 & 12 & -26 & 28 & 15 \end{pmatrix}$$

.263

$$A = \begin{pmatrix} 27 & 26 & 13 & -26 & -26 \\ -71 & -94 & -40 & 122 & 122 \\ 56 & 80 & 40 & -94 & -94 \\ 28 & 40 & 13 & -33 & -47 \\ -58 & -82 & -27 & 96 & 110 \end{pmatrix}$$

.264

$$A = \begin{pmatrix} -43 & -22 & -102 & 116 & 80 \\ 66 & 34 & 173 & -190 & -128 \\ 0 & 0 & -3 & 0 & 0 \\ 0 & 0 & 12 & -31 & -16 \\ 0 & 0 & -24 & 32 & 17 \end{pmatrix}$$

.265

$$A = \begin{pmatrix} -2 & -35 & 56 & 27 & 91 \\ 87 & 97 & -86 & -196 & -195 \\ 66 & 43 & -11 & -145 & -80 \\ 39 & 17 & 4 & -62 & -9 \\ -3 & 19 & -40 & 21 & -32 \end{pmatrix}$$

.266

$$A = \begin{pmatrix} -46 & -78 & 30 & -54 & 0 \\ 52 & 90 & -36 & 64 & 0 \\ -38 & -68 & 22 & -46 & 0 \\ -62 & -110 & 42 & -78 & 0 \\ -28 & -50 & 18 & -34 & -2 \end{pmatrix}$$

.267

$$A = \begin{pmatrix} 48 & 57 & 6 & 123 & 6 \\ -84 & -76 & 34 & -144 & 36 \\ -3 & -2 & 14 & -3 & 2 \\ 26 & 17 & -21 & 25 & -22 \\ 9 & 23 & 11 & 60 & 24 \end{pmatrix}$$

.268

$$A = \begin{pmatrix} 7 & -50 & -12 & 17 & 67 \\ -6 & 22 & 6 & -6 & -30 \\ -12 & 115 & 25 & -49 & -164 \\ 18 & -126 & -30 & 46 & 174 \\ -12 & 76 & 18 & -28 & -106 \end{pmatrix}$$

.269

$$A = \begin{pmatrix} 20 & 0 & -30 & 0 & -60 \\ -24 & -4 & 21 & -24 & 36 \\ 0 & 0 & 5 & 0 & 0 \\ 12 & 12 & 9 & 32 & 24 \\ 0 & 0 & 3 & 0 & 8 \end{pmatrix}$$

.270

$$A = \begin{pmatrix} 31 & 12 & 0 & -12 & 12 \\ -2 & -75 & 46 & 60 & -36 \\ -37 & -83 & 42 & 72 & -48 \\ 11 & -35 & 23 & 31 & -12 \\ -11 & 35 & -23 & -18 & 25 \end{pmatrix}$$

.271

$$A = \begin{pmatrix} 31 & 26 & 21 & 26 & -21 \\ -5 & 3 & -5 & -7 & 5 \\ -9 & -10 & 1 & -10 & 9 \\ 5 & 6 & 5 & 16 & -5 \\ 13 & 17 & 13 & 17 & -3 \end{pmatrix}$$

.272

$$A = \begin{pmatrix} 36 & -30 & -12 & 6 & -42 \\ -16 & 34 & 16 & 0 & 20 \\ 46 & -58 & -22 & 6 & -62 \\ -60 & 84 & 48 & 6 & 114 \\ -4 & 4 & 4 & 0 & 8 \end{pmatrix}$$

.273

$$A = \begin{pmatrix} 18 & 20 & 12 & 44 & 4 \\ 0 & 6 & -18 & -21 & 3 \\ 0 & 22 & 42 & 43 & -1 \\ 0 & -14 & -12 & -11 & -1 \\ 0 & -16 & -15 & -32 & 17 \end{pmatrix}$$

.274

$$A = \begin{pmatrix} 6 & -4 & 7 & -7 & 4 \\ 11 & -9 & 7 & -7 & 4 \\ -6 & 4 & -7 & 7 & -4 \\ 12 & -7 & 13 & -13 & 7 \\ 29 & -20 & 27 & -27 & 15 \end{pmatrix}$$

.275

$$A = \begin{pmatrix} 15 & -8 & 12 & -12 & -12 \\ 24 & 28 & -39 & 39 & -21 \\ -58 & 10 & -3 & 9 & 67 \\ -74 & -4 & 16 & -10 & 81 \\ 8 & -8 & 12 & -12 & -5 \end{pmatrix}$$

.276

$$A = \begin{pmatrix} 18 & -40 & -40 & 80 & 40 \\ 0 & 23 & 5 & -10 & -5 \\ 0 & -30 & -12 & 60 & 30 \\ 0 & 25 & 25 & -32 & -25 \\ 0 & -70 & -70 & 140 & 88 \end{pmatrix}$$

.277

$$A = \begin{pmatrix} 61 & 36 & -39 & -45 & 39 \\ 27 & 38 & -23 & -29 & 23 \\ -24 & -19 & 37 & 23 & -21 \\ 18 & 14 & -14 & -2 & 15 \\ -81 & -65 & 70 & 82 & -54 \end{pmatrix}$$

.278

$$A = \begin{pmatrix} 79 & -40 & 89 & 66 & 104 \\ -25 & 11 & -6 & -7 & -19 \\ 56 & -49 & 113 & 70 & 106 \\ 12 & -9 & 19 & 27 & 21 \\ -113 & 78 & -168 & -119 & -176 \end{pmatrix}$$

.279

$$A = \begin{pmatrix} -19 & -36 & -11 & 12 & 14 \\ 23 & 42 & 16 & -17 & -16 \\ 20 & 44 & 11 & -15 & -17 \\ 24 & 48 & 18 & -21 & -18 \\ 35 & 69 & 25 & -26 & -28 \end{pmatrix}$$

.280

$$A = \begin{pmatrix} -6 & -50 & 24 & -52 & -22 \\ 109 & 66 & -24 & 52 & 109 \\ 43 & 28 & 2 & 28 & 43 \\ -80 & -50 & 24 & -36 & -80 \\ -7 & 50 & -24 & 52 & 9 \end{pmatrix}$$

.281

$$A = \begin{pmatrix} -15 & 0 & 0 & 0 & 0 \\ -60 & -98 & 30 & 66 & 124 \\ -13 & -27 & 0 & 26 & 40 \\ 22 & 29 & -8 & -35 & -43 \\ -53 & -71 & 23 & 54 & 91 \end{pmatrix}$$

.282

$$A = \begin{pmatrix} -63 & 2 & 26 & -4 & 188 \\ 15 & -44 & 51 & 94 & 84 \\ 45 & -1 & -8 & 2 & -116 \\ 26 & -32 & 26 & 67 & 6 \\ -23 & 1 & 13 & -2 & 77 \end{pmatrix}$$

.283

$$A = \begin{pmatrix} -15 & 37 & 43 & -28 & 5 \\ -24 & 66 & 81 & -53 & 8 \\ 9 & -25 & -31 & 20 & -3 \\ -6 & 18 & 23 & -15 & 2 \\ 21 & -69 & -91 & 60 & -7 \end{pmatrix}$$

.284

$$A = \begin{pmatrix} -69 & -67 & -32 & 34 & 33 \\ 35 & 35 & 16 & -18 & -18 \\ 35 & 39 & 12 & -18 & -18 \\ -32 & -32 & -16 & 13 & 16 \\ 37 & 45 & 15 & -18 & -23 \end{pmatrix}$$

.285

$$A = \begin{pmatrix} 50 & -84 & -126 & 126 & -42 \\ -20 & 48 & 60 & -60 & 20 \\ 48 & -96 & -136 & 144 & -48 \\ 33 & -66 & -99 & 107 & -33 \\ 37 & -74 & -111 & 111 & -29 \end{pmatrix}$$

.286

$$A = \begin{pmatrix} -30 & 16 & 0 & 16 & 0 \\ 64 & -30 & -48 & -32 & 0 \\ 0 & 0 & -14 & 0 & 0 \\ -96 & 48 & 48 & 50 & 0 \\ -97 & 49 & 96 & 49 & 2 \end{pmatrix}$$

.287

$$A = \begin{pmatrix} -41 & -2 & 2 & -55 & 32 \\ 57 & 19 & -3 & 54 & -5 \\ 19 & 2 & 14 & 17 & -33 \\ 38 & 2 & -2 & 52 & -20 \\ 0 & 0 & 0 & 0 & -9 \end{pmatrix}$$

.288

$$A = \begin{pmatrix} 1 & 41 & -36 & 75 & -103 \\ -8 & 56 & -18 & 19 & -33 \\ -52 & 135 & -1 & -55 & 63 \\ 12 & 97 & -72 & 130 & -191 \\ 20 & 21 & -54 & 131 & -178 \end{pmatrix}$$

.289

$$A = \begin{pmatrix} -28 & 2 & -6 & -88 & 40 \\ 37 & 7 & 10 & 93 & -45 \\ 1 & 1 & 10 & -2 & 2 \\ 3 & -1 & 3 & 22 & -24 \\ 4 & 0 & 0 & 8 & -10 \end{pmatrix}$$

.290

$$A = \begin{pmatrix} 63 & 0 & -32 & 32 & -32 \\ 32 & -1 & -16 & 16 & -16 \\ 176 & 0 & -89 & 88 & -88 \\ 32 & 0 & -16 & 15 & -24 \\ 0 & 0 & 0 & 0 & -9 \end{pmatrix}$$

.291

$$A = \begin{pmatrix} -22 & -30 & 2 & -9 & -34 \\ -21 & -27 & 21 & 11 & -31 \\ -30 & -62 & 10 & -5 & -70 \\ 30 & 62 & -30 & -15 & 70 \\ 21 & 19 & -21 & -11 & 23 \end{pmatrix}$$

.292

$$A = \begin{pmatrix} -46 & -37 & -32 & -10 & -54 \\ -18 & -33 & -18 & 0 & -18 \\ 53 & 82 & 48 & 0 & 53 \\ -32 & -27 & -23 & -7 & -37 \\ 23 & 9 & 14 & 10 & 31 \end{pmatrix}$$

.293

$$A = \begin{pmatrix} 62 & -51 & 51 & 1 & -1 \\ 89 & -77 & 84 & 2 & 0 \\ 17 & -16 & 23 & 1 & 1 \\ -141 & 133 & -134 & 3 & -1 \\ 72 & -67 & 67 & 2 & 7 \end{pmatrix}$$

.294

$$A = \begin{pmatrix} 33 & -13 & 150 & 18 & -17 \\ 8 & 10 & 56 & 8 & -8 \\ 0 & 0 & 10 & 0 & 0 \\ 1 & -1 & 20 & 18 & -1 \\ 13 & -10 & 122 & 14 & 3 \end{pmatrix}$$

.295

$$A = \begin{pmatrix} -14 & 2 & 1 & -32 & -32 \\ -30 & -108 & -62 & -30 & -31 \\ 60 & 188 & 110 & 60 & 62 \\ 4 & -192 & -94 & 22 & 2 \\ -4 & 192 & 94 & -4 & 16 \end{pmatrix}$$

.296

$$A = \begin{pmatrix} 3 & -22 & 17 & -24 & -14 \\ 12 & 39 & -20 & 28 & 16 \\ 32 & 61 & -28 & 56 & 32 \\ 24 & 44 & -28 & 51 & 22 \\ -14 & -27 & 18 & -25 & -2 \end{pmatrix}$$

.297

$$A = \begin{pmatrix} 15 & -184 & 110 & -3 & -190 \\ 0 & 95 & -46 & 1 & 82 \\ 0 & -42 & 36 & 0 & -42 \\ 0 & -52 & 28 & 13 & -52 \\ 0 & -108 & 60 & -1 & -95 \end{pmatrix}$$

.298

$$A = \begin{pmatrix} -50 & -25 & -63 & -37 & -26 \\ -12 & -25 & -22 & -13 & -9 \\ 89 & 65 & 146 & 94 & 67 \\ -61 & -45 & -111 & -79 & -47 \\ -75 & -55 & -136 & -79 & -72 \end{pmatrix}$$

.299

$$A = \begin{pmatrix} 64 & 70 & -4 & -62 & -66 \\ 0 & -14 & 0 & 0 & 0 \\ -182 & -102 & 14 & 190 & 198 \\ -62 & -16 & 2 & 70 & 66 \\ 142 & 80 & -6 & -148 & -148 \end{pmatrix}$$

.300

$$A = \begin{pmatrix} 58 & 179 & -79 & 58 & 63 \\ -40 & -18 & 19 & -41 & 64 \\ 44 & 172 & -72 & 44 & 84 \\ 46 & -11 & -11 & 48 & -107 \\ 46 & 51 & -32 & 47 & -43 \end{pmatrix}$$

.301

$$A = \begin{pmatrix} -30 & -35 & 73 & -29 & 60 \\ 66 & 63 & -120 & 40 & -106 \\ 4 & 5 & 16 & 4 & 5 \\ -28 & -17 & 68 & 0 & 66 \\ -9 & -8 & 7 & -6 & 19 \end{pmatrix}$$

.302

$$A = \begin{pmatrix} 16 & -56 & 36 & 12 & -20 \\ 57 & -101 & 49 & 10 & -22 \\ 51 & -79 & 31 & 10 & -22 \\ 8 & -10 & 5 & -17 & -1 \\ 5 & -7 & 4 & -1 & -17 \end{pmatrix}$$

.303

$$A = \begin{pmatrix} 12 & 0 & 0 & 0 & 0 \\ 16 & -25 & -83 & -84 & -24 \\ -48 & 93 & 188 & 171 & 51 \\ 48 & -93 & -195 & -178 & -51 \\ -32 & 76 & 166 & 168 & 61 \end{pmatrix}$$

.304

$$A = \begin{pmatrix} -3 & 0 & 10 & -1 & 11 \\ -20 & -7 & -40 & 5 & -45 \\ 3 & 1 & 2 & 1 & 10 \\ 12 & 0 & 24 & -10 & 27 \\ -3 & -1 & -11 & -1 & -19 \end{pmatrix}$$

.305

$$A = \begin{pmatrix} -78 & -48 & -4 & -48 & 0 \\ -12 & 5 & 0 & -6 & 0 \\ -25 & -13 & 14 & -13 & 0 \\ 178 & 96 & 8 & 107 & 0 \\ 94 & 48 & 4 & 48 & 16 \end{pmatrix}$$

.306

$$A = \begin{pmatrix} 16 & -14 & 1 & 10 & -14 \\ -4 & 6 & 3 & 7 & -16 \\ -1 & 2 & 18 & -2 & 0 \\ -4 & -3 & 3 & 18 & -9 \\ -1 & 12 & -2 & -8 & 27 \end{pmatrix}$$

.307

$$A = \begin{pmatrix} -61 & -82 & -52 & -31 & 68 \\ -16 & -29 & -16 & 1 & 34 \\ 15 & -14 & 6 & 29 & 28 \\ 51 & 96 & 51 & 7 & -96 \\ -33 & -65 & -33 & 0 & 70 \end{pmatrix}$$

.308

$$A = \begin{pmatrix} 34 & -115 & -101 & -47 & -33 \\ 21 & -169 & -168 & -54 & -33 \\ -21 & 162 & 161 & 54 & 33 \\ 0 & 27 & 27 & 20 & 0 \\ 0 & -21 & -21 & -33 & -13 \end{pmatrix}$$

.309

$$A = \begin{pmatrix} -11 & -43 & 31 & 45 & 29 \\ -3 & 1 & 5 & 8 & 6 \\ -5 & -14 & 19 & 13 & 10 \\ -16 & -34 & 24 & 45 & 23 \\ 11 & 23 & -17 & -24 & -6 \end{pmatrix}$$

.310

$$A = \begin{pmatrix} -9 & -18 & -3 & -20 & -16 \\ 6 & 42 & -18 & 40 & 56 \\ -57 & 6 & -111 & -56 & 68 \\ 57 & -6 & 105 & 50 & -68 \\ -60 & -24 & -84 & -76 & 22 \end{pmatrix}$$

.311

$$A = \begin{pmatrix} 8 & -22 & 0 & 0 & -22 \\ 76 & -36 & -38 & 52 & -96 \\ 38 & -61 & -11 & -10 & -51 \\ -76 & 18 & 38 & -68 & 94 \\ -76 & 22 & 38 & -52 & 82 \end{pmatrix}$$

.312

$$A = \begin{pmatrix} 16 & 21 & -3 & -5 & 13 \\ 12 & 61 & -7 & -12 & 31 \\ 10 & 42 & 5 & -10 & 26 \\ 13 & 55 & -8 & -2 & 34 \\ -14 & -58 & 8 & 14 & -25 \end{pmatrix}$$

.313

$$A = \begin{pmatrix} 28 & -30 & -28 & -14 & -8 \\ 99 & -95 & -83 & -66 & -54 \\ -45 & 42 & 33 & 45 & 42 \\ 28 & -16 & -12 & -14 & 6 \\ -42 & 24 & 18 & 9 & -17 \end{pmatrix}$$

.314

$$A = \begin{pmatrix} -7 & 4 & 130 & 20 & 18 \\ 8 & 9 & 95 & -20 & -21 \\ 0 & 0 & -3 & 0 & 0 \\ -45 & 7 & 188 & 84 & 74 \\ 43 & -5 & -123 & -77 & -68 \end{pmatrix}$$

.315

$$A = \begin{pmatrix} -171 & -167 & -89 & 81 & 7 \\ 182 & 176 & 93 & -83 & -9 \\ 88 & 86 & 47 & -42 & -2 \\ 124 & 118 & 62 & -53 & -6 \\ -90 & -89 & -47 & 45 & 4 \end{pmatrix}$$

.316

$$A = \begin{pmatrix} 39 & 18 & -19 & 3 & 21 \\ 181 & 198 & -182 & 9 & 186 \\ 126 & 124 & -107 & 6 & 129 \\ 128 & 126 & -128 & 26 & 132 \\ -92 & -90 & 92 & -6 & -76 \end{pmatrix}$$

.317

$$A = \begin{pmatrix} -57 & 56 & -10 & -36 & 46 \\ 42 & -53 & 15 & 0 & -43 \\ -87 & 74 & -7 & -92 & 62 \\ 3 & -4 & 1 & -7 & -3 \\ -132 & 138 & -29 & -66 & 114 \end{pmatrix}$$

.318

$$A = \begin{pmatrix} 23 & -1 & -5 & 0 & -3 \\ -55 & 18 & 27 & 0 & 16 \\ -5 & 1 & 16 & 0 & 2 \\ 82 & -10 & -41 & 10 & -22 \\ 57 & -8 & -29 & -3 & -2 \end{pmatrix}$$

.319

$$A = \begin{pmatrix} -80 & -178 & -70 & 106 & 70 \\ 63 & 153 & 62 & -98 & -62 \\ 26 & -25 & -40 & 51 & 50 \\ 36 & 89 & 35 & -61 & -35 \\ 53 & 48 & -4 & 5 & 14 \end{pmatrix}$$

.320

$$A = \begin{pmatrix} 13 & 0 & 0 & 0 & 0 \\ -109 & 56 & 16 & -55 & 15 \\ 106 & -40 & 0 & 56 & -16 \\ -175 & 76 & 16 & -75 & 15 \\ -175 & 76 & 16 & -91 & 31 \end{pmatrix}$$

.321

$$A = \begin{pmatrix} -6 & -15 & 9 & 6 & -13 & -6 \\ 4 & 9 & -4 & -2 & 3 & 2 \\ -7 & -12 & 10 & 5 & -12 & -5 \\ 8 & 13 & -8 & -2 & 11 & 5 \\ 2 & 4 & -2 & -2 & 8 & 2 \\ 1 & 1 & -2 & -1 & -1 & 3 \end{pmatrix}$$

.322

$$A = \begin{pmatrix} -13 & -80 & 123 & -114 & -137 & 114 \\ -1 & 2 & 9 & -8 & -9 & 8 \\ 2 & 7 & -8 & 12 & 14 & -14 \\ -12 & -48 & 71 & -60 & -81 & 66 \\ 13 & 52 & -80 & 74 & 96 & -74 \\ -3 & -10 & 21 & -17 & -20 & 27 \end{pmatrix}$$

.323

$$A = \begin{pmatrix} 5 & 13 & -49 & -2 & 13 & 53 \\ -2 & -12 & 56 & 3 & -15 & -61 \\ 8 & 0 & 31 & 3 & -10 & -34 \\ -13 & -18 & 45 & 0 & -11 & -48 \\ 5 & 5 & -10 & 1 & 3 & 11 \\ 1 & -5 & 28 & 2 & -8 & -30 \end{pmatrix}$$

.324

$$A = \begin{pmatrix} 21 & -156 & 6 & -4 & 7 & 9 \\ 0 & 9 & 0 & 0 & 0 & 0 \\ -8 & 16 & 25 & 8 & 16 & -8 \\ 12 & -36 & -12 & 5 & -24 & 12 \\ 4 & -36 & -2 & -4 & 12 & 5 \\ 4 & 76 & -10 & -4 & -17 & 18 \end{pmatrix}$$

.325

$$A = \begin{pmatrix} 20 & -16 & 0 & 1 & -17 & -22 \\ -60 & 58 & 0 & -30 & 70 & 62 \\ 4 & -36 & 18 & 2 & -38 & -46 \\ 28 & 2 & 0 & 32 & -12 & -6 \\ 50 & -30 & 0 & 25 & -37 & -50 \\ 20 & -24 & 0 & 10 & -34 & -8 \end{pmatrix}$$

.326

$$A = \begin{pmatrix} 87 & 156 & -96 & 36 & -19 & 47 \\ -55 & -112 & 47 & -61 & -18 & -10 \\ 18 & 48 & -15 & 13 & -5 & 17 \\ 55 & 132 & -22 & 106 & 43 & -15 \\ 0 & -12 & -51 & -63 & -43 & 51 \\ 73 & 168 & -83 & 61 & 0 & 48 \end{pmatrix}$$

.327

$$A = \begin{pmatrix} 76 & 1 & -71 & -150 & -150 & 25 \\ -30 & -24 & 30 & 69 & 69 & -39 \\ 68 & 15 & -63 & -147 & -147 & 38 \\ 68 & 15 & -62 & -141 & -140 & 38 \\ -68 & -15 & 62 & 133 & 132 & -38 \\ 27 & 43 & -27 & -66 & -66 & 57 \end{pmatrix}$$

.328

$$A = \begin{pmatrix} -7 & -71 & -2 & 87 & 34 & -157 \\ 4 & 73 & 2 & -92 & -34 & 172 \\ -14 & 62 & -1 & -92 & -44 & 160 \\ 16 & -9 & -1 & 23 & 17 & -44 \\ -17 & 48 & 2 & -77 & -42 & 133 \\ 4 & -30 & -1 & 41 & 17 & -80 \end{pmatrix}$$

.329

$$A = \begin{pmatrix} 12 & -7 & -12 & 3 & -3 & -1 \\ 4 & 1 & -9 & 2 & -2 & -1 \\ 0 & 0 & 7 & 0 & 0 & 0 \\ 7 & -13 & -13 & 6 & -1 & -5 \\ 7 & -11 & -15 & 3 & 4 & -2 \\ -7 & 13 & 13 & 1 & 1 & 12 \end{pmatrix}$$

.330

$$A = \begin{pmatrix} 40 & 17 & 35 & -40 & 45 & 18 \\ -58 & -77 & -97 & 69 & -118 & -15 \\ 30 & 56 & 66 & -39 & 78 & 5 \\ 31 & -13 & 9 & -37 & 31 & 22 \\ 17 & -7 & 5 & -22 & 20 & 12 \\ -73 & -107 & -126 & 85 & -149 & -14 \end{pmatrix}$$

.331

$$A = \begin{pmatrix} -27 & 65 & 26 & 10 & -1 & -84 \\ 48 & -149 & -59 & -24 & 12 & 187 \\ -14 & 64 & 24 & 11 & -14 & -80 \\ -38 & 117 & 47 & 17 & -10 & -149 \\ -17 & 45 & 18 & 7 & -3 & -58 \\ 36 & -100 & -40 & -16 & 4 & 126 \end{pmatrix}$$

.332

$$A = \begin{pmatrix} -71 & 41 & 95 & 78 & -77 & 11 \\ 55 & -67 & -105 & -82 & 81 & -13 \\ -41 & 35 & 59 & 62 & -61 & 9 \\ 4 & -3 & -7 & -26 & 6 & -1 \\ 9 & -6 & -15 & -14 & -6 & -2 \\ -49 & 41 & 93 & 74 & -73 & -9 \end{pmatrix}$$

.333

$$A = \begin{pmatrix} -26 & -24 & -70 & -17 & 0 & 24 \\ -23 & -21 & -63 & -15 & 0 & 22 \\ 5 & 4 & 13 & 3 & 0 & -4 \\ 71 & 64 & 186 & 46 & 0 & -64 \\ -54 & -48 & -140 & -34 & 1 & 48 \\ 10 & 8 & 24 & 6 & 0 & -7 \end{pmatrix}$$

.334

$$A = \begin{pmatrix} 10 & 44 & 35 & 49 & 64 & 63 \\ -4 & -6 & -5 & -13 & -14 & -14 \\ 11 & 59 & 50 & 69 & 85 & 90 \\ 5 & 22 & 18 & 31 & 31 & 38 \\ -3 & -19 & -16 & -22 & -24 & -30 \\ -5 & -29 & -24 & -34 & -41 & -43 \end{pmatrix}$$

.335

$$A = \begin{pmatrix} -94 & -47 & 92 & 49 & 72 & 154 \\ 21 & -6 & -19 & -14 & -18 & -32 \\ 18 & -22 & -12 & -16 & -18 & -10 \\ -84 & -24 & 78 & 44 & 72 & 132 \\ -35 & -35 & 47 & 17 & 20 & 78 \\ -9 & 11 & 1 & 8 & 9 & -5 \end{pmatrix}$$

.336

$$A = \begin{pmatrix} 4 & 3 & -9 & -7 & 4 & -12 \\ 1 & 8 & 1 & -1 & 1 & -2 \\ -2 & -5 & 6 & 1 & 1 & 5 \\ 14 & 2 & 33 & 40 & -34 & 38 \\ 8 & 3 & 15 & 17 & -13 & 16 \\ -3 & 5 & -13 & -15 & 13 & -15 \end{pmatrix}$$

.337

$$A = \begin{pmatrix} 22 & -29 & -6 & 26 & 44 & 48 \\ -26 & 150 & 17 & -135 & -179 & -186 \\ -12 & 69 & 20 & -68 & -88 & -91 \\ -18 & 119 & 12 & -106 & -148 & -152 \\ 18 & -129 & -12 & 128 & 170 & 162 \\ -26 & 158 & 17 & -155 & -199 & -194 \end{pmatrix}$$

.338

$$A = \begin{pmatrix} -100 & 13 & -182 & -64 & -76 & -94 \\ -97 & 30 & -148 & -52 & -62 & -76 \\ 58 & -7 & 107 & 31 & 37 & 45 \\ 5 & 0 & 8 & 22 & 3 & 5 \\ -8 & 2 & -11 & -4 & 14 & -5 \\ 28 & -3 & 43 & 15 & 18 & 41 \end{pmatrix}$$

.339

$$A = \begin{pmatrix} -9 & -11 & 1 & -8 & -22 & 36 \\ 7 & -26 & 3 & -7 & -24 & 39 \\ -10 & 20 & -17 & 14 & 39 & -63 \\ 5 & -8 & 1 & -19 & -16 & 27 \\ -21 & 41 & -6 & 28 & 67 & -132 \\ -10 & 21 & -3 & 15 & 41 & -80 \end{pmatrix}$$

.340

$$A = \begin{pmatrix} -7 & 14 & -29 & -18 & -28 & 15 \\ -27 & 19 & -28 & 15 & -30 & 7 \\ 20 & -18 & 44 & 17 & 37 & -18 \\ -27 & 33 & -68 & -44 & -65 & 37 \\ -51 & 51 & -106 & -58 & -97 & 53 \\ -70 & 95 & -195 & -160 & -185 & 116 \end{pmatrix}$$

.341

$$A = \begin{pmatrix} 34 & -10 & -23 & -41 & -27 & -4 \\ -4 & 22 & 4 & 13 & 8 & 4 \\ 23 & -13 & -36 & -43 & -34 & 21 \\ -20 & 10 & 37 & 62 & 31 & -6 \\ 18 & -10 & -17 & -53 & -14 & -16 \\ 26 & -16 & -61 & -52 & -40 & 40 \end{pmatrix}$$

.342

$$A = \begin{pmatrix} 40 & -3 & 8 & -31 & -23 & -9 \\ 114 & 69 & 56 & -53 & -1 & -57 \\ -17 & -102 & -37 & -66 & -104 & 42 \\ 157 & 16 & 51 & -122 & -80 & -54 \\ -193 & -53 & -75 & 131 & 67 & 78 \\ 36 & -62 & -14 & -82 & -92 & 19 \end{pmatrix}$$

.343

$$A = \begin{pmatrix} 125 & -88 & 68 & 130 & -38 & -60 \\ 115 & -98 & 44 & 106 & -16 & -65 \\ -87 & 71 & -38 & -83 & 15 & 49 \\ -115 & 97 & -44 & -107 & 20 & 61 \\ -159 & 162 & -30 & -126 & -2 & 99 \\ -159 & 163 & -30 & -125 & -5 & 102 \end{pmatrix}$$

.344

$$A = \begin{pmatrix} 0 & -2 & -12 & 9 & 0 & 11 \\ -4 & 4 & -6 & 6 & 1 & 6 \\ -16 & -8 & -44 & 36 & -2 & 44 \\ 6 & 0 & 9 & -5 & 0 & -9 \\ 0 & 2 & 6 & -3 & 4 & -5 \\ -24 & -10 & -66 & 51 & -2 & 65 \end{pmatrix}$$

.345

$$A = \begin{pmatrix} 4 & 0 & 0 & 1 & 3 & 2 \\ -38 & 30 & -9 & -29 & -42 & -40 \\ 26 & -18 & 9 & 20 & 30 & 28 \\ -48 & 33 & -11 & -34 & -56 & -52 \\ 47 & -33 & 11 & 36 & 56 & 50 \\ -47 & 33 & -11 & -36 & -53 & -47 \end{pmatrix}$$

.346

$$A = \begin{pmatrix} -54 & 1 & -37 & -38 & -37 & 145 \\ 12 & 77 & 64 & -55 & 12 & 48 \\ -4 & -64 & -47 & 63 & -4 & -80 \\ 11 & 64 & 68 & -43 & 11 & 61 \\ 75 & 100 & 138 & -63 & 58 & -6 \\ 2 & 34 & 34 & -34 & 2 & 62 \end{pmatrix}$$

.347

$$A = \begin{pmatrix} 24 & 3 & -1 & -5 & 5 & 4 \\ 25 & 26 & 4 & -15 & 16 & 7 \\ -8 & 0 & 1 & 0 & -1 & 15 \\ 28 & 9 & 5 & 1 & 15 & 4 \\ 1 & -5 & 14 & 6 & 10 & -20 \\ -3 & 1 & -13 & -2 & 1 & 30 \end{pmatrix}$$

.348

$$A = \begin{pmatrix} 29 & 13 & -50 & 54 & -7 & -3 \\ -35 & -14 & 101 & -74 & -20 & 6 \\ 17 & 12 & -40 & 36 & 11 & -3 \\ 17 & 12 & -33 & 39 & 1 & -3 \\ 17 & 12 & -33 & 36 & 4 & -3 \\ -18 & -2 & 54 & -35 & -5 & 3 \end{pmatrix}$$

.349

$$A = \begin{pmatrix} -25 & -14 & 7 & -6 & -7 & -9 \\ 110 & 106 & -14 & 72 & 94 & 26 \\ 52 & 58 & -24 & 36 & 44 & 8 \\ -59 & -68 & 9 & -56 & -51 & -17 \\ -73 & -75 & 2 & -48 & -79 & -5 \\ -26 & -31 & 5 & -18 & -22 & -26 \end{pmatrix}$$

.350

$$A = \begin{pmatrix} 11 & 60 & 68 & 4 & -33 & 30 \\ -8 & -3 & -11 & -5 & 5 & -3 \\ 1 & -23 & -19 & -1 & 14 & -13 \\ -10 & -79 & -91 & -1 & 43 & -39 \\ -11 & -26 & -34 & -6 & 19 & -12 \\ 0 & 45 & 45 & 3 & -27 & 29 \end{pmatrix}$$

.351

$$A = \begin{pmatrix} -21 & -9 & 4 & 8 & -5 & -5 \\ -4 & -21 & 1 & 7 & 0 & -6 \\ -4 & -6 & -15 & 8 & -2 & -6 \\ 4 & 4 & -2 & -25 & 0 & 6 \\ 4 & 3 & -1 & -7 & -18 & 6 \\ 10 & 13 & -6 & -19 & 3 & -3 \end{pmatrix}$$

.352

$$A = \begin{pmatrix} -61 & -52 & -76 & -52 & 102 & -62 \\ 164 & 131 & 28 & 4 & -66 & 146 \\ -80 & -56 & -37 & -32 & 76 & -68 \\ 120 & 84 & 52 & 43 & -84 & 104 \\ 12 & 12 & -8 & -12 & 25 & 14 \\ -32 & -20 & 68 & 52 & -68 & -17 \end{pmatrix}$$

.353

$$A = \begin{pmatrix} 15 & 7 & -68 & -43 & 39 & -56 \\ -21 & -8 & 6 & -13 & 16 & -33 \\ -2 & 0 & -21 & -26 & 22 & -36 \\ -3 & 0 & -42 & -32 & 33 & -54 \\ -10 & -8 & -20 & -17 & 29 & -35 \\ 1 & -2 & 44 & 30 & -33 & 50 \end{pmatrix}$$

.354

$$A = \begin{pmatrix} -45 & 54 & 52 & 3 & 4 & -2 \\ -106 & 113 & 98 & 6 & 8 & -4 \\ 56 & -54 & -41 & -3 & -4 & 2 \\ -13 & 13 & 12 & 11 & 1 & -1 \\ -31 & 29 & 28 & 3 & 14 & -1 \\ -81 & 77 & 74 & 6 & 7 & 8 \end{pmatrix}$$

.355

$$A = \begin{pmatrix} -5 & -2 & -17 & -17 & 1 & -19 \\ -8 & 25 & -84 & -100 & -14 & -90 \\ 0 & 2 & 30 & 34 & 0 & 38 \\ -4 & -20 & -80 & -69 & 16 & -60 \\ -12 & 14 & -111 & -114 & -4 & -95 \\ 4 & 21 & 65 & 48 & -18 & 35 \end{pmatrix}$$

.356

$$A = \begin{pmatrix} 106 & 114 & -172 & -55 & -184 & -31 \\ -82 & -87 & 130 & 43 & 139 & 25 \\ -14 & -16 & 34 & 2 & 36 & 8 \\ 35 & 37 & -49 & -21 & -53 & -8 \\ 5 & 7 & -22 & 3 & -23 & -5 \\ 56 & 59 & -93 & -27 & -99 & -20 \end{pmatrix}$$

.357

$$A = \begin{pmatrix} -29 & -9 & 22 & 29 & 13 & -1 \\ -15 & -20 & 22 & 22 & 5 & 0 \\ -9 & -5 & -1 & 18 & 6 & -1 \\ -4 & -2 & 6 & -8 & 3 & 0 \\ -3 & 0 & 4 & 3 & -16 & 0 \\ -3 & -5 & 6 & 12 & 8 & -16 \end{pmatrix}$$

.358

$$A = \begin{pmatrix} 15 & -130 & 3 & -89 & -26 & -87 \\ -18 & 67 & -3 & 56 & 16 & 53 \\ 21 & -106 & -11 & -71 & -23 & -69 \\ 40 & -177 & 5 & -136 & -35 & -117 \\ -4 & 13 & 1 & 9 & -12 & 11 \\ -2 & 9 & 0 & 6 & 2 & -9 \end{pmatrix}$$

.359

$$A = \begin{pmatrix} 62 & 123 & 49 & -16 & -113 & 49 \\ -12 & -13 & -1 & 10 & 8 & -1 \\ 30 & 83 & 57 & 8 & -103 & 51 \\ 5 & 17 & 15 & 15 & -29 & 15 \\ 56 & 140 & 64 & -12 & -131 & 64 \\ 72 & 163 & 52 & -40 & -123 & 58 \end{pmatrix}$$

.360

$$A = \begin{pmatrix} -26 & 60 & 34 & -16 & -2 & -2 \\ -26 & 31 & -1 & -33 & 25 & -1 \\ 18 & 6 & 32 & 42 & -39 & 0 \\ 20 & -30 & -17 & 22 & 1 & 1 \\ 6 & -12 & 18 & 0 & -37 & 0 \\ -2 & -93 & -124 & -101 & 170 & 16 \end{pmatrix}$$

.361

$$A = \begin{pmatrix} 42 & 28 & 0 & -44 & -18 & 54 \\ 25 & -8 & 0 & -13 & 13 & 72 \\ -12 & 28 & 20 & -2 & -14 & -36 \\ -7 & 28 & 0 & 11 & -15 & -24 \\ 44 & -56 & 0 & -18 & 47 & 129 \\ -10 & 0 & 0 & 12 & 1 & -7 \end{pmatrix}$$

.362

$$A = \begin{pmatrix} -10 & 2 & -8 & 4 & -2 & -10 \\ 2 & -7 & -9 & 6 & -4 & -13 \\ -5 & -6 & 1 & -10 & 7 & 18 \\ -3 & -7 & 15 & -21 & 7 & 22 \\ -6 & -7 & 5 & -9 & -3 & 12 \\ 3 & 4 & -6 & 6 & -4 & -20 \end{pmatrix}$$

.363

$$A = \begin{pmatrix} -125 & 66 & -133 & -28 & 122 & 15 \\ -130 & 135 & -167 & -68 & 166 & -51 \\ 116 & 4 & 93 & 12 & -76 & -88 \\ -24 & 34 & -35 & -5 & 34 & -23 \\ 80 & 2 & 63 & 12 & -51 & -61 \\ -124 & 104 & -150 & -48 & 144 & -25 \end{pmatrix}$$

.364

$$A = \begin{pmatrix} 11 & 2 & 2 & -1 & -1 & -1 \\ 2 & 18 & 4 & -5 & 0 & -4 \\ 6 & 33 & 34 & -22 & -4 & -19 \\ 4 & 16 & 10 & 0 & -1 & -9 \\ 8 & 38 & 25 & -26 & 8 & -22 \\ 6 & 27 & 17 & -19 & -1 & -5 \end{pmatrix}$$

.365

$$A = \begin{pmatrix} -13 & 38 & 80 & -13 & 55 & -23 \\ 9 & 1 & -28 & 3 & -19 & 8 \\ -6 & 6 & 33 & -2 & 11 & -6 \\ 8 & -11 & -24 & 18 & -16 & 7 \\ -13 & 20 & 39 & -7 & 41 & -11 \\ -9 & 7 & 30 & -3 & 15 & 4 \end{pmatrix}$$

.366

$$A = \begin{pmatrix} 5 & -9 & 11 & -6 & -3 & -2 \\ 4 & 17 & -5 & 3 & 1 & 2 \\ 6 & 10 & 28 & -6 & -11 & 7 \\ 9 & 15 & 28 & 1 & -18 & 11 \\ 4 & 7 & 7 & -2 & 5 & 3 \\ -1 & -2 & -5 & 2 & 3 & 10 \end{pmatrix}$$

.367

$$A = \begin{pmatrix} -10 & 76 & 0 & -10 & -86 & 38 \\ -82 & -84 & 116 & -142 & -2 & 50 \\ 62 & 108 & -116 & 122 & -42 & -38 \\ 92 & 57 & -139 & 164 & 40 & -82 \\ -92 & -121 & 139 & -164 & 24 & 50 \\ -20 & -106 & 46 & -44 & 84 & -16 \end{pmatrix}$$

.368

$$A = \begin{pmatrix} 118 & -113 & -111 & 35 & 13 & 32 \\ 76 & -72 & -83 & 41 & 15 & 37 \\ 59 & -58 & -45 & -6 & -2 & -5 \\ -98 & 102 & 102 & -3 & -6 & -16 \\ 145 & -159 & -157 & 63 & 36 & 58 \\ 93 & -93 & -93 & 0 & 0 & 14 \end{pmatrix}$$

.369

$$A = \begin{pmatrix} -37 & -21 & 4 & -28 & 3 & 14 \\ 58 & 62 & 28 & 96 & -19 & -70 \\ -77 & -34 & 12 & -41 & 1 & 22 \\ -48 & -41 & -20 & -61 & 11 & 50 \\ 1 & -8 & -19 & -15 & 6 & 22 \\ -77 & -36 & 4 & -45 & 2 & 31 \end{pmatrix}$$

.370

$$A = \begin{pmatrix} 153 & -83 & -67 & 131 & -172 & 139 \\ -56 & 57 & 29 & -55 & 74 & -59 \\ 11 & -22 & 6 & 10 & -29 & 14 \\ 0 & -8 & -5 & 19 & -9 & 1 \\ 30 & -12 & -12 & 30 & -13 & 30 \\ -121 & 85 & 66 & -118 & 166 & -108 \end{pmatrix}$$

.371

$$A = \begin{pmatrix} -17 & 31 & 25 & 67 & -104 & -78 & -36 \\ -32 & -11 & -12 & 30 & -4 & -48 & 18 \\ 24 & -12 & -4 & -48 & 60 & 60 & 15 \\ -22 & -67 & -60 & -25 & 107 & 23 & 71 \\ -16 & -12 & -9 & 12 & 11 & -20 & 13 \\ 10 & -61 & -53 & -74 & 143 & 86 & 66 \\ -8 & 4 & 4 & 16 & -20 & -20 & 3 \end{pmatrix}$$

.372

$$A = \begin{pmatrix} -88 & 118 & -36 & 21 & 186 & -102 & 94 \\ -20 & 25 & -4 & 10 & 69 & -45 & 28 \\ 47 & -61 & 12 & -13 & -122 & 72 & -61 \\ 168 & -141 & 137 & 9 & -167 & 29 & -173 \\ -76 & 25 & -87 & -36 & -42 & 77 & 62 \\ -19 & -18 & -40 & -29 & -90 & 79 & 2 \\ 74 & -12 & 86 & 34 & 18 & -62 & -76 \end{pmatrix}$$

.373

$$A = \begin{pmatrix} 3 & 29 & 11 & -22 & 23 & 38 & 11 \\ -3 & 5 & 21 & -11 & 10 & 5 & 9 \\ 6 & -18 & -10 & 21 & -22 & -30 & -13 \\ 2 & -9 & 1 & 13 & -5 & -10 & -1 \\ -19 & 59 & 62 & -69 & 80 & 97 & 42 \\ 12 & -25 & -50 & 44 & -44 & -43 & -29 \\ -2 & -13 & 19 & -5 & 4 & -6 & 15 \end{pmatrix}$$

.374

$$A = \begin{pmatrix} -23 & -27 & -104 & -44 & 53 & 130 & 60 \\ -23 & -42 & -144 & -64 & 71 & 178 & 79 \\ 21 & 36 & 136 & 65 & -68 & -173 & -75 \\ -14 & -22 & -84 & -41 & 43 & 105 & 49 \\ -4 & -8 & -36 & -20 & 8 & 41 & 11 \\ 7 & 14 & 57 & 29 & -25 & -73 & -26 \\ -1 & -2 & -7 & -3 & 4 & 9 & 0 \end{pmatrix}$$

.375

$$A = \begin{pmatrix} 37 & 80 & -53 & -15 & 81 & 38 & 0 \\ -2 & -119 & 111 & 60 & -118 & -29 & 1 \\ 22 & -55 & 41 & 26 & -46 & 13 & 1 \\ -19 & 10 & -9 & -1 & 1 & -19 & -1 \\ 2 & 109 & -111 & -60 & 108 & 29 & -1 \\ -22 & -126 & 101 & 41 & -118 & -32 & 1 \\ 2 & 19 & -48 & -26 & 10 & 11 & 16 \end{pmatrix}$$

.376

$$A = \begin{pmatrix} 61 & -23 & 77 & -73 & 58 & 30 & 14 \\ 17 & 10 & 31 & -30 & 23 & 12 & 6 \\ -46 & 25 & -68 & 81 & -67 & -36 & -14 \\ -22 & 12 & -42 & 58 & -32 & -18 & -6 \\ 26 & -14 & 50 & -46 & 58 & 20 & 8 \\ -14 & 8 & -26 & 24 & -20 & 8 & -4 \\ -36 & 20 & -68 & 63 & -52 & -29 & 9 \end{pmatrix}$$

.377

$$A = \begin{pmatrix} -20 & 0 & 0 & 0 & 0 & 0 & 0 \\ 50 & -21 & -22 & -28 & 3 & -21 & 22 \\ 84 & -5 & -56 & -52 & 5 & -37 & 40 \\ -4 & 0 & 2 & -15 & 0 & 2 & -2 \\ 101 & -7 & -46 & -59 & -11 & -44 & 47 \\ -126 & 8 & 58 & 77 & -8 & 38 & -60 \\ -48 & 3 & 22 & 28 & -3 & 21 & -40 \end{pmatrix}$$

.378

$$A = \begin{pmatrix} -3 & 50 & -16 & -34 & -36 & 2 & 34 \\ 6 & -123 & 40 & 82 & 85 & -6 & -84 \\ -2 & 0 & 1 & -2 & -3 & -2 & 0 \\ -2 & 25 & -8 & -16 & -18 & 1 & 17 \\ 4 & -50 & 16 & 34 & 37 & -2 & -34 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ -8 & 149 & -48 & -99 & -103 & 7 & 102 \end{pmatrix}$$

.379

$$A = \begin{pmatrix} -34 & -55 & -39 & -27 & 55 & -83 & 4 \\ 67 & -6 & -29 & -51 & 16 & 39 & 43 \\ -78 & -66 & -26 & 12 & 66 & -114 & -12 \\ 48 & 13 & -15 & -41 & -13 & 33 & 16 \\ 59 & 3 & -20 & -40 & 7 & 40 & 39 \\ 26 & 52 & 36 & 26 & -52 & 72 & -8 \\ 20 & 10 & 0 & -10 & -10 & 20 & 2 \end{pmatrix}$$

.380

$$A = \begin{pmatrix} 101 & -96 & 31 & -105 & -87 & -35 & 35 \\ 71 & -63 & 1 & -71 & -72 & -1 & 1 \\ -36 & 38 & -23 & 37 & 28 & 23 & -23 \\ 77 & -80 & 30 & -81 & -71 & -34 & 34 \\ -42 & 42 & 0 & 42 & 51 & 0 & 0 \\ -157 & 160 & -3 & 157 & 160 & 12 & -3 \\ -78 & 78 & 30 & 77 & 88 & -21 & 30 \end{pmatrix}$$

.381

$$A = \begin{pmatrix} 102 & -173 & -5 & -68 & 117 & 80 & 74 \\ 63 & -110 & -4 & -47 & 83 & 57 & 55 \\ -21 & 25 & -23 & 13 & -9 & -19 & -1 \\ 78 & -172 & -61 & -56 & 138 & 73 & 101 \\ 48 & -128 & -83 & -46 & 126 & 50 & 94 \\ 42 & -60 & 41 & -28 & 31 & 47 & 14 \\ -27 & 63 & 23 & 25 & -56 & -31 & -36 \end{pmatrix}$$

.382

$$A = \begin{pmatrix} 17 & -39 & 10 & 33 & 10 & 12 & 56 \\ -2 & 146 & 61 & -70 & 61 & -29 & -43 \\ -11 & -132 & -145 & 22 & -148 & 32 & -125 \\ -1 & 58 & 41 & -16 & 41 & -15 & 12 \\ 13 & -14 & 85 & 50 & 88 & -2 & 167 \\ -1 & 97 & 0 & -66 & 0 & -10 & -106 \\ -1 & 73 & 23 & -36 & 23 & -15 & -35 \end{pmatrix}$$

.383

$$A = \begin{pmatrix} 11 & -6 & -1 & -20 & 33 & 3 & 11 \\ -45 & -16 & 64 & -34 & -38 & 6 & 37 \\ 77 & 28 & -110 & 60 & 63 & -12 & -64 \\ 29 & 17 & -51 & 42 & 7 & -9 & -37 \\ 31 & 18 & -56 & 47 & 6 & -9 & -41 \\ -17 & -8 & 26 & -16 & -12 & 2 & 17 \\ -74 & -25 & 104 & -53 & -65 & 9 & 59 \end{pmatrix}$$

.384

$$A = \begin{pmatrix} 56 & -29 & -93 & 107 & -93 & -50 & -6 \\ -43 & -17 & -19 & -84 & -33 & 175 & -29 \\ 9 & 29 & 42 & -33 & 7 & 18 & -22 \\ 17 & -2 & -49 & -8 & -91 & 112 & -58 \\ 36 & -30 & -96 & 88 & -89 & -14 & -14 \\ 30 & -16 & -76 & 33 & -104 & 70 & -43 \\ 14 & -15 & -44 & 15 & -58 & 43 & -14 \end{pmatrix}$$

.385

$$A = \begin{pmatrix} 15 & 10 & -13 & 8 & 13 & -6 & 2 \\ -25 & 15 & 32 & 19 & 47 & -23 & 11 \\ -11 & 8 & 20 & 15 & 32 & -15 & 7 \\ -39 & 23 & 38 & 58 & 104 & -50 & 22 \\ 66 & -25 & -75 & -65 & -138 & 72 & -32 \\ 59 & -22 & -69 & -57 & -132 & 75 & -28 \\ -42 & 19 & 45 & 45 & 101 & -49 & 32 \end{pmatrix}$$

.386

$$A = \begin{pmatrix} 15 & 6 & -8 & 0 & 5 & -9 & -6 \\ -12 & 11 & 14 & 0 & -4 & -12 & -4 \\ 20 & 24 & -31 & 0 & 18 & 2 & -8 \\ -38 & 4 & 30 & 15 & -16 & -9 & -7 \\ 32 & 18 & -50 & 0 & 37 & 4 & -4 \\ 32 & 18 & -50 & 0 & 22 & 19 & -4 \\ -54 & -40 & 95 & 0 & -40 & -8 & 25 \end{pmatrix}$$

.387

$$A = \begin{pmatrix} -33 & -28 & -10 & 16 & -18 & -35 & 3 \\ -89 & -44 & -19 & 35 & -37 & -72 & 5 \\ 85 & 51 & 26 & -32 & 36 & 68 & -6 \\ 82 & 50 & 16 & -23 & 36 & 67 & -5 \\ 77 & 47 & 17 & -32 & 41 & 65 & -3 \\ 89 & 55 & 19 & -34 & 38 & 81 & -6 \\ -31 & -21 & -9 & 12 & -12 & -26 & 11 \end{pmatrix}$$

.388

$$A = \begin{pmatrix} -16 & 1 & 22 & 1 & -22 & -2 & -24 \\ -72 & -7 & 170 & 8 & -155 & -15 & -135 \\ -18 & 2 & 39 & 2 & -45 & -1 & -45 \\ 73 & -9 & -192 & -24 & 177 & 17 & 159 \\ -14 & 1 & 25 & 1 & -30 & -5 & -30 \\ 13 & -2 & -39 & -2 & 40 & -9 & 35 \\ -3 & 1 & 18 & 1 & -19 & 5 & -18 \end{pmatrix}$$

.389

$$A = \begin{pmatrix} 26 & 0 & 26 & -26 & 0 & 13 & -13 \\ 72 & -18 & 5 & -32 & -31 & -27 & -76 \\ 166 & -46 & 111 & -119 & -85 & 44 & -191 \\ 152 & -32 & 134 & -129 & -60 & 70 & -152 \\ -34 & 4 & 48 & -7 & 4 & 67 & 23 \\ -94 & 30 & -57 & 63 & 55 & -20 & 117 \\ 12 & 2 & -25 & 5 & 5 & -33 & 0 \end{pmatrix}$$

.390

$$A = \begin{pmatrix} -22 & 105 & -12 & -32 & -46 & 103 & 30 \\ 40 & -47 & -64 & 8 & 35 & -46 & -51 \\ 6 & 10 & -19 & -5 & 0 & 9 & -6 \\ 20 & 186 & -148 & -70 & -51 & 181 & -16 \\ 16 & 79 & -82 & -30 & -20 & 77 & -17 \\ -24 & 128 & -16 & -40 & -54 & 124 & 36 \\ -22 & 114 & -19 & -35 & -48 & 114 & 28 \end{pmatrix}$$

.391

$$A = \begin{pmatrix} 7 & 24 & -10 & -18 & 11 & 38 & 21 \\ -57 & 91 & 59 & 3 & 35 & 65 & 63 \\ 57 & -67 & -50 & -10 & -36 & -52 & -47 \\ -20 & 35 & 1 & -1 & 20 & 47 & 20 \\ -81 & 99 & 89 & 9 & 69 & 83 & 75 \\ 78 & -89 & -98 & -20 & -47 & -48 & -70 \\ -20 & 21 & 25 & 5 & 14 & 15 & 26 \end{pmatrix}$$

.392

$$A = \begin{pmatrix} 62 & -53 & 3 & 52 & 3 & -3 & -53 \\ -41 & 49 & 1 & -41 & -1 & 3 & 41 \\ -109 & 105 & 7 & -109 & -5 & 12 & 114 \\ -190 & 185 & -5 & -180 & -9 & 18 & 196 \\ 109 & -105 & 5 & 109 & 16 & -14 & -116 \\ 35 & -33 & 3 & 35 & 3 & 3 & -39 \\ -91 & 87 & -3 & -91 & -5 & 12 & 106 \end{pmatrix}$$

.393

$$A = \begin{pmatrix} -5 & 7 & -18 & 46 & -101 & -69 & -11 \\ 5 & -10 & -11 & 23 & -54 & -36 & -7 \\ 6 & 3 & -29 & 33 & -77 & -51 & -12 \\ 2 & 5 & -5 & 9 & -42 & -30 & -2 \\ -1 & 2 & 3 & 1 & -10 & 0 & 3 \\ 4 & 1 & -9 & 17 & -41 & -39 & -6 \\ -6 & -6 & 18 & -42 & 93 & 63 & 0 \end{pmatrix}$$

.394

$$A = \begin{pmatrix} -40 & -18 & -3 & 19 & 33 & 16 & 30 \\ 108 & 60 & 4 & -67 & -114 & -61 & -95 \\ 96 & 62 & -3 & -59 & -103 & -54 & -85 \\ -59 & -34 & -2 & 31 & 61 & 34 & 51 \\ 179 & 113 & 6 & -111 & -197 & -102 & -157 \\ -84 & -55 & -4 & 50 & 90 & 39 & 75 \\ -77 & -46 & -4 & 47 & 80 & 42 & 61 \end{pmatrix}$$

.395

$$A = \begin{pmatrix} -1 & -11 & -11 & -11 & 18 & -3 & 7 \\ -71 & -57 & -21 & -75 & 58 & 18 & 23 \\ 110 & 97 & 60 & 99 & -97 & -14 & -39 \\ 104 & 93 & 40 & 111 & -91 & -15 & -37 \\ 118 & 100 & 47 & 101 & -88 & -16 & -44 \\ -8 & -6 & -5 & -7 & 8 & 14 & 2 \\ -127 & -105 & -53 & -105 & 114 & 15 & 65 \end{pmatrix}$$

.396

$$A = \begin{pmatrix} -14 & 12 & 8 & 11 & -7 & 18 & -2 \\ 51 & 147 & -88 & -100 & -149 & -47 & -153 \\ 6 & -25 & 13 & 3 & 22 & -5 & 19 \\ -14 & -95 & 49 & 63 & 98 & 15 & 97 \\ 83 & 45 & -66 & -80 & -54 & -69 & -77 \\ -28 & 33 & 3 & 7 & -26 & 31 & -19 \\ -28 & 160 & -52 & -52 & -153 & 17 & -132 \end{pmatrix}$$

.397

$$A = \begin{pmatrix} 50 & -1 & 9 & -6 & 28 & 25 & -25 \\ 22 & -33 & -2 & -8 & -58 & -50 & -66 \\ 14 & -20 & 21 & -6 & -16 & -14 & -30 \\ 0 & -14 & 0 & 15 & -21 & -18 & -14 \\ 13 & -27 & 0 & -5 & -11 & -25 & -36 \\ -45 & 57 & -5 & 14 & 44 & 56 & 89 \\ 15 & 23 & 8 & -1 & 49 & 43 & 29 \end{pmatrix}$$

.398

$$A = \begin{pmatrix} 43 & -56 & 61 & 57 & 48 & 58 & -25 \\ -35 & 77 & -68 & -64 & -36 & -54 & 30 \\ -34 & 64 & -54 & -67 & -45 & -61 & 31 \\ -34 & 67 & -75 & -55 & -54 & -70 & 31 \\ -30 & 50 & -58 & -57 & -15 & -49 & 25 \\ 53 & -98 & 111 & 107 & 72 & 116 & -47 \\ 6 & -6 & 8 & 8 & 0 & 4 & 14 \end{pmatrix}$$

.399

$$A = \begin{pmatrix} 25 & 26 & 18 & 1 & 22 & -16 & -13 \\ 7 & 15 & 8 & 2 & 8 & -7 & -4 \\ -20 & -26 & -18 & -6 & -23 & 21 & 11 \\ -1 & -8 & 1 & 10 & -4 & 0 & 2 \\ -24 & -40 & -24 & 0 & -26 & 23 & 16 \\ -24 & -39 & -25 & -1 & -31 & 29 & 15 \\ 7 & 6 & 4 & -1 & 6 & -3 & 0 \end{pmatrix}$$

.400

$$A = \begin{pmatrix} -7 & 184 & -19 & -62 & -26 & -48 & -61 \\ -3 & -57 & 6 & 14 & 5 & 11 & 12 \\ 1 & 47 & -17 & -16 & -8 & -12 & -16 \\ -8 & -7 & 6 & -15 & -4 & -2 & -11 \\ -2 & -43 & 5 & 14 & -7 & 11 & 13 \\ -4 & -80 & 10 & 26 & 10 & 8 & 24 \\ 3 & -42 & 2 & 17 & 9 & 13 & 9 \end{pmatrix}$$

.401

$$A = \begin{pmatrix} -11 & -2 & 1 & -1 & 4 & -1 & -2 \\ 29 & -60 & -18 & 8 & 31 & 24 & -34 \\ -54 & 124 & 65 & -74 & -30 & -105 & 70 \\ -15 & 33 & 20 & -31 & -9 & -27 & 19 \\ 59 & -124 & -72 & 61 & 28 & 96 & -75 \\ 26 & -41 & -16 & 5 & 28 & 7 & -31 \\ 60 & -138 & -88 & 81 & 33 & 117 & -92 \end{pmatrix}$$

.402

$$A = \begin{pmatrix} -12 & 3 & 9 & 9 & 5 & 15 & -4 \\ -23 & 8 & 9 & 15 & 11 & 27 & -10 \\ -27 & 5 & 9 & 28 & 23 & 45 & -22 \\ 22 & -2 & 2 & -20 & -24 & -45 & 24 \\ 36 & -12 & -51 & 3 & 29 & 18 & -30 \\ -1 & 1 & 11 & -10 & -13 & -13 & 14 \\ 67 & -15 & -36 & -45 & -25 & -66 & 25 \end{pmatrix}$$

.403

$$A = \begin{pmatrix} -18 & 195 & 74 & -46 & -28 & -169 & -76 \\ -1 & 115 & 37 & -37 & 95 & -108 & -76 \\ -2 & 33 & 4 & -6 & -48 & -31 & -2 \\ -5 & 100 & 43 & -33 & -65 & -89 & -26 \\ -1 & 50 & 17 & -12 & -10 & -43 & -22 \\ 1 & 32 & 3 & -13 & 81 & -39 & -32 \\ -5 & 194 & 67 & -51 & 55 & -167 & -106 \end{pmatrix}$$

.404

$$A = \begin{pmatrix} 12 & -2 & 6 & -29 & 27 & 8 & 16 \\ 2 & 19 & 0 & 2 & -22 & 4 & -6 \\ 5 & 7 & 14 & 7 & -93 & 14 & -22 \\ 0 & 2 & -3 & 21 & -24 & 1 & -5 \\ 0 & -1 & 0 & 3 & 33 & -4 & 2 \\ -2 & -3 & -3 & 9 & 32 & 5 & 5 \\ -1 & 4 & 0 & -13 & -47 & 13 & 13 \end{pmatrix}$$

.405

$$A = \begin{pmatrix} -26 & -41 & 23 & 4 & -4 & 14 & 7 \\ 4 & -2 & 1 & 2 & 2 & -3 & 1 \\ 34 & 54 & -15 & 7 & 27 & -36 & 15 \\ -31 & -38 & -10 & -21 & -32 & 36 & -25 \\ 32 & 87 & -62 & -19 & -4 & -22 & -21 \\ -25 & -36 & 2 & -7 & -19 & 18 & -11 \\ -56 & -120 & 61 & 11 & -23 & 47 & 1 \end{pmatrix}$$

.406

$$A = \begin{pmatrix} 11 & -4 & 11 & -23 & 0 & 5 & -1 \\ 32 & -7 & 40 & -64 & 12 & 16 & 16 \\ 8 & -2 & 12 & -11 & 3 & 2 & 7 \\ 12 & -4 & 15 & -20 & 2 & 4 & 5 \\ -38 & 10 & -48 & 72 & -12 & -17 & -20 \\ 46 & -14 & 58 & -82 & 11 & 18 & 22 \\ 8 & -2 & 10 & -16 & 3 & 4 & 5 \end{pmatrix}$$

.407

$$A = \begin{pmatrix} 2 & 4 & 29 & 28 & 20 & 23 & -17 \\ -12 & -19 & -145 & -139 & -91 & -130 & 83 \\ -22 & -33 & 12 & 11 & 39 & 71 & -78 \\ 31 & 46 & 18 & 16 & -36 & -66 & 85 \\ -3 & -6 & 52 & 52 & 52 & 80 & -63 \\ 0 & 0 & 36 & 36 & 36 & 42 & -36 \\ 6 & 7 & 130 & 127 & 103 & 139 & -104 \end{pmatrix}$$

.408

$$A = \begin{pmatrix} 23 & 97 & 67 & 28 & 94 & 63 & -45 \\ -32 & 19 & 5 & -7 & -14 & 11 & 33 \\ 18 & -43 & -49 & -21 & 10 & -73 & 17 \\ 4 & -80 & -86 & -47 & -16 & -124 & 56 \\ 16 & -23 & -2 & 7 & -13 & 2 & -24 \\ 32 & 62 & 68 & 42 & 52 & 83 & -74 \\ 50 & 37 & 27 & 14 & 84 & 4 & -51 \end{pmatrix}$$

.409

$$A = \begin{pmatrix} 52 & 98 & -3 & -59 & 54 & 20 & -45 \\ -77 & -157 & 11 & 102 & -91 & -38 & 77 \\ 42 & 90 & -2 & -57 & 49 & 23 & -44 \\ -64 & -135 & 14 & 93 & -74 & -36 & 66 \\ -15 & -32 & 3 & 20 & -10 & -9 & 16 \\ -32 & -69 & 3 & 42 & -38 & -8 & 32 \\ -73 & -156 & 8 & 96 & -87 & -34 & 79 \end{pmatrix}$$

.410

$$A = \begin{pmatrix} 120 & -148 & 88 & -52 & -94 & -52 & 30 \\ 86 & -108 & 57 & -34 & -60 & -33 & 20 \\ -170 & 190 & -128 & 64 & 135 & 72 & -33 \\ 46 & -52 & 33 & -28 & -44 & -23 & 6 \\ -20 & 22 & -15 & 6 & 11 & 11 & -1 \\ -134 & 150 & -90 & 52 & 99 & 42 & -29 \\ 120 & -134 & 85 & -42 & -111 & -57 & 5 \end{pmatrix}$$

.411

$$A = \begin{pmatrix} 18 & -21 & 18 & 18 & -19 & -13 & -2 \\ 6 & -35 & 44 & 44 & -46 & -34 & -4 \\ 47 & -145 & 117 & 108 & -131 & -43 & -25 \\ -59 & 116 & -64 & -59 & 106 & -2 & 29 \\ -24 & 55 & -34 & -38 & 66 & 7 & 12 \\ 6 & -42 & 36 & 36 & -38 & -11 & -4 \\ 20 & -77 & 58 & 60 & -69 & -31 & 4 \end{pmatrix}$$

.412

$$A = \begin{pmatrix} 166 & -46 & -155 & 81 & 18 & -45 & -75 \\ 95 & -4 & -95 & 18 & 3 & -12 & -15 \\ 166 & -46 & -155 & 81 & 18 & -45 & -75 \\ 48 & -13 & -46 & 27 & 5 & -12 & -21 \\ -39 & 8 & 38 & -14 & 2 & 8 & 13 \\ -24 & 8 & 23 & -14 & -3 & 13 & 13 \\ 12 & -15 & -9 & 24 & 6 & -12 & -19 \end{pmatrix}$$

.413

$$A = \begin{pmatrix} 55 & 20 & -19 & -68 & -46 & -4 & 35 \\ 112 & 33 & -109 & -73 & -79 & 6 & 76 \\ -6 & 5 & 30 & -19 & -4 & -4 & -2 \\ 68 & 17 & -59 & -45 & -53 & 2 & 48 \\ -64 & -14 & 58 & 50 & 60 & -2 & -44 \\ -157 & -29 & 154 & 99 & 110 & 3 & -107 \\ -90 & -23 & 75 & 81 & 72 & -1 & -52 \end{pmatrix}$$

.414

$$A = \begin{pmatrix} 14 & 2 & 1 & -2 & 1 & 1 & -2 \\ 6 & 10 & -3 & 6 & -3 & -3 & 6 \\ 44 & -35 & -15 & 44 & -25 & -22 & 35 \\ 82 & -64 & -59 & 98 & -47 & -41 & 64 \\ 0 & 0 & 0 & 0 & 16 & 0 & 0 \\ 28 & -22 & -20 & 28 & -16 & 2 & 22 \\ -38 & 29 & 28 & -38 & 22 & 19 & -13 \end{pmatrix}$$

.415

$$A = \begin{pmatrix} -9 & 42 & -24 & -52 & 41 & -8 & 35 \\ 12 & -16 & -11 & -1 & -9 & -2 & 21 \\ 7 & 30 & -34 & -38 & 27 & -6 & 30 \\ 13 & 26 & -24 & -50 & 19 & -6 & 40 \\ 7 & 41 & -24 & -51 & 24 & -8 & 36 \\ 14 & 36 & -29 & -47 & 29 & -23 & 47 \\ 4 & 11 & -9 & -15 & 9 & -2 & 0 \end{pmatrix}$$

.416

$$A = \begin{pmatrix} 6 & 14 & 16 & -9 & 2 & 2 & -19 \\ 59 & -34 & -41 & 15 & 100 & -16 & 109 \\ 25 & -30 & -19 & 15 & 28 & -7 & 55 \\ 3 & 69 & 86 & -44 & 88 & 2 & -59 \\ -28 & 46 & 50 & -26 & -8 & 9 & -74 \\ -28 & -26 & -38 & 31 & -101 & 18 & -8 \\ 59 & -95 & -102 & 54 & 42 & -18 & 165 \end{pmatrix}$$

.417

$$A = \begin{pmatrix} -20 & -6 & 6 & 9 & -10 & 1 & -5 \\ 1 & -11 & -2 & 0 & 1 & 1 & -2 \\ 13 & 10 & -23 & -13 & 16 & -2 & 7 \\ 0 & 1 & -1 & -15 & 1 & 0 & 1 \\ 13 & 12 & -12 & -18 & 6 & -2 & 10 \\ 10 & 3 & -3 & -9 & 10 & -18 & 10 \\ 2 & -1 & 1 & -1 & 1 & -2 & -10 \end{pmatrix}$$

.418

$$A = \begin{pmatrix} 23 & -7 & 29 & -7 & -36 & -34 & 37 \\ -37 & 19 & -91 & 16 & 156 & 118 & -71 \\ -68 & -9 & -59 & -9 & 38 & 35 & -68 \\ 1 & -25 & 63 & -22 & -122 & -85 & 35 \\ -79 & -14 & -51 & -14 & 23 & 34 & -79 \\ 100 & 24 & 62 & 24 & -36 & -47 & 100 \\ 10 & 5 & 5 & 5 & 0 & 0 & -4 \end{pmatrix}$$

.419

$$A = \begin{pmatrix} 113 & 117 & 37 & 24 & -53 & 14 & -22 \\ -23 & -13 & -1 & -4 & 13 & -4 & 3 \\ 0 & 0 & 6 & 0 & 0 & 0 & 0 \\ 28 & 35 & 16 & 16 & -13 & 2 & -7 \\ 153 & 178 & 64 & 37 & -67 & 19 & -35 \\ 37 & 47 & 21 & 10 & -17 & 12 & -10 \\ 57 & 76 & 40 & 16 & -25 & 4 & -8 \end{pmatrix}$$

.420

$$A = \begin{pmatrix} -91 & 170 & 169 & 187 & 96 & -107 & 6 \\ -65 & 120 & 149 & 157 & 80 & -90 & -1 \\ -70 & 140 & 147 & 167 & 83 & -95 & 0 \\ 72 & -142 & -167 & -185 & -87 & 100 & 2 \\ 37 & -75 & -83 & -88 & -56 & 51 & -1 \\ 7 & -13 & -18 & -19 & -7 & 1 & 1 \\ 11 & -21 & -31 & -29 & -19 & 18 & -8 \end{pmatrix}$$

פתרונות

פתרון (תרגיל 1). בפתרונות הבאים מופיעות דוגמאות למטריצות P העונות על השאלה. יכולות להיות מטריצות אחרות מאלו.

.1

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} -1 & -1 \\ -1 & -2 \end{pmatrix}$$

.2

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} -1 & -2 \\ 2 & 3 \end{pmatrix}$$

.3

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} 0 & 1 \\ 1 & 2 \end{pmatrix}$$

.4

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} 1 & 2 \\ -1 & -3 \end{pmatrix}$$

.5

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}$$

.6

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} -1 & -3 \\ 1 & 2 \end{pmatrix}$$

.7

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} -1 & 0 \\ -1 & 1 \end{pmatrix}$$

.8

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} 0 & 1 \\ -1 & -3 \end{pmatrix}$$

.9

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} -1 & 0 \\ 2 & 1 \end{pmatrix}$$

.10

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} -1 & -2 \\ -2 & -3 \end{pmatrix}$$

.11

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} 2 & 1 \\ 1 & 0 \end{pmatrix}$$

.12

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} 2 & 1 \\ 3 & 1 \end{pmatrix}$$

.13

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} -2 & -3 \\ 1 & 2 \end{pmatrix}$$

.14

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} 2 & 3 \\ -1 & -1 \end{pmatrix}$$

.15

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} -2 & 1 \\ -1 & 0 \end{pmatrix}$$

.16

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} -3 & -1 \\ 1 & 0 \end{pmatrix}$$

.17

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} 1 & 1 \\ 2 & 3 \end{pmatrix}$$

.18

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} 3 & -1 \\ 1 & 0 \end{pmatrix}$$

.19

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} 1 & 0 \\ -3 & 1 \end{pmatrix}$$

.20

$$J = \operatorname{diag}(J_2(0))$$
$$P = \begin{pmatrix} 3 & 1 \\ 2 & 1 \end{pmatrix}$$

.21

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 1 & 0 \\ -1 & -1 & -1 \\ 0 & 1 & 1 \end{pmatrix}$$

.22

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -2 & -1 & -4 \\ 4 & 1 & 7 \\ -1 & 0 & -2 \end{pmatrix}$$

.23

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 0 & -1 \\ -1 & 0 & -1 \\ -1 & -1 & -1 \end{pmatrix}$$

.24

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -1 & 0 & 0 \\ 3 & 1 & 3 \\ -2 & -1 & -2 \end{pmatrix}$$

.25

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 1 & 2 & 5 \\ 1 & 1 & 2 \\ -1 & -1 & -3 \end{pmatrix}$$

.26

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 6 & 3 & 7 \\ 2 & 1 & 2 \\ 9 & 4 & 10 \end{pmatrix}$$

.27

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -3 & -2 & 3 \\ 0 & 0 & -1 \\ 2 & 1 & -1 \end{pmatrix}$$

.28

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 0 & -1 \\ 2 & 1 & 1 \\ 3 & 2 & 0 \end{pmatrix}$$

.29

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -3 & -3 \\ 1 & 2 & 2 \\ -1 & -2 & -3 \end{pmatrix}$$

.30

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 0 & -3 \\ -3 & -1 & -8 \\ 4 & 1 & 10 \end{pmatrix}$$

.31

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & -1 & 4 \\ 1 & 0 & 3 \\ 0 & -1 & 2 \end{pmatrix}$$

.32

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -1 & 0 & -1 \\ 0 & -1 & 0 \\ 1 & 3 & 2 \end{pmatrix}$$

.33

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -1 & 0 \\ 1 & 1 & 0 \\ 0 & 1 & 1 \end{pmatrix}$$

.34

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 1 & -2 & -3 \\ 1 & -1 & -1 \\ 0 & -1 & -1 \end{pmatrix}$$

.35

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 2 & 3 & 4 \\ -4 & -5 & -7 \\ -3 & -4 & -5 \end{pmatrix}$$

.36

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -5 & -2 & -9 \\ 2 & 1 & 4 \\ -8 & -3 & -15 \end{pmatrix}$$

.37

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 3 & 2 & 4 \\ 3 & 1 & 3 \\ -4 & -2 & -5 \end{pmatrix}$$

.38

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -2 & -3 & -3 \\ -1 & -1 & -1 \\ 0 & 1 & 0 \end{pmatrix}$$

.39

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -3 & -6 & -7 \\ 0 & -1 & -1 \\ -2 & -3 & -4 \end{pmatrix}$$

.40

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -1 & -3 \\ 0 & 1 & 2 \\ 1 & 2 & 6 \end{pmatrix}$$

.41

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 0 & -1 \\ 0 & -1 & 1 \\ 1 & 2 & 0 \end{pmatrix}$$

.42

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -1 & -1 \\ -1 & -1 & -2 \\ 0 & -1 & 1 \end{pmatrix}$$

.43

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -6 & -2 & -9 \\ -2 & -1 & -3 \\ -3 & -1 & -5 \end{pmatrix}$$

.44

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & -1 & -1 \\ 1 & -4 & -3 \\ 0 & 1 & 1 \end{pmatrix}$$

.45

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -3 & -1 & -5 \\ 2 & 1 & 4 \\ -2 & 0 & -3 \end{pmatrix}$$

.46

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -1 & -3 & -1 \\ 0 & -1 & 0 \\ 0 & 0 & -1 \end{pmatrix}$$

.47

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 0 & 0 & -1 \\ 1 & 1 & 0 \\ 2 & 1 & 1 \end{pmatrix}$$

.48

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 0 & -1 \\ 2 & -1 & 2 \\ 2 & 0 & 3 \end{pmatrix}$$

.49

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 1 & 2 \\ -2 & -1 & -3 \\ 1 & 1 & 3 \end{pmatrix}$$

.50

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -3 & -1 & -5 \\ -3 & -1 & -6 \\ 5 & 2 & 9 \end{pmatrix}$$

.51

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 2 & -3 & -2 \\ -3 & 5 & 3 \\ 0 & -1 & -1 \end{pmatrix}$$

.52

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & 2 & 3 \\ -3 & -4 & -6 \\ -1 & -1 & -1 \end{pmatrix}$$

.53

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & 1 & 4 \\ -1 & 0 & -3 \\ -1 & 0 & -2 \end{pmatrix}$$

.54

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 2 & 4 \\ 0 & 0 & 1 \\ 1 & 3 & 5 \end{pmatrix}$$

.55

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -2 & -3 & -8 \\ -1 & -2 & -5 \\ 2 & 3 & 9 \end{pmatrix}$$

.56

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 0 & -1 & -2 \\ 0 & 0 & -1 \\ 1 & 3 & 3 \end{pmatrix}$$

.57

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 5 & 6 & 7 \\ -9 & -10 & -12 \\ 8 & 9 & 11 \end{pmatrix}$$

.58

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -1 & -1 \\ -1 & -2 & -2 \\ 1 & 2 & 3 \end{pmatrix}$$

.59

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 3 & 1 & 9 \\ 1 & 0 & 3 \\ -4 & -1 & -11 \end{pmatrix}$$

.60

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -2 & -1 & -2 \\ 8 & 6 & 9 \\ -3 & -2 & -3 \end{pmatrix}$$

.61

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 2 & 3 \\ 0 & 1 & 2 \\ -1 & -8 & -13 \end{pmatrix}$$

.62

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -1 & 0 & -3 \\ -2 & -1 & -6 \\ 0 & 0 & -1 \end{pmatrix}$$

.63

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -1 & -2 & -5 \\ 1 & 1 & 4 \\ 0 & 0 & 1 \end{pmatrix}$$

.64

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 1 & 2 & 2 \\ -2 & -2 & -3 \\ -1 & -1 & -1 \end{pmatrix}$$

.65

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 1 & 1 & 2 \\ 1 & -1 & 1 \\ 1 & 0 & 2 \end{pmatrix}$$

.66

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 2 & 1 & 2 \\ 3 & 1 & 3 \\ -12 & -5 & -13 \end{pmatrix}$$

.67

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -4 & -2 & -5 \\ -3 & -1 & -3 \\ -2 & -1 & -3 \end{pmatrix}$$

.68

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -2 & -3 & 0 \\ 3 & 4 & -1 \\ 2 & 3 & -1 \end{pmatrix}$$

.69

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 4 & 6 & 9 \\ -1 & -2 & -3 \\ -2 & -3 & -4 \end{pmatrix}$$

.70

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -1 & -1 \\ 0 & 1 & 0 \\ 1 & 0 & -3 \end{pmatrix}$$

.71

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 3 & 2 & 3 \\ 6 & 5 & 7 \\ -2 & -1 & -2 \end{pmatrix}$$

.72

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 0 & -1 & -3 \\ 1 & 2 & 5 \\ -1 & -3 & -7 \end{pmatrix}$$

.73

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -1 & -3 & 3 \\ 1 & 4 & -3 \\ 0 & 1 & -1 \end{pmatrix}$$

.74

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -1 & -1 \\ 3 & 8 & 10 \\ -2 & -5 & -6 \end{pmatrix}$$

.75

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 1 & 3 \\ -6 & -4 & -15 \\ -3 & -2 & -7 \end{pmatrix}$$

.76

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 0 & 1 & 1 \\ -2 & 2 & 1 \\ 1 & -2 & -2 \end{pmatrix}$$

.77

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -1 & -2 \\ 2 & 1 & 2 \\ -2 & -1 & -3 \end{pmatrix}$$

.78

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 1 & 1 & 0 \\ 1 & 0 & 3 \\ 0 & 0 & 1 \end{pmatrix}$$

.79

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -1 & -1 \\ -5 & -4 & -7 \\ 3 & 2 & 4 \end{pmatrix}$$

.80

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 2 & 1 & 2 \\ 1 & 0 & 1 \\ 0 & 1 & -1 \end{pmatrix}$$

.81

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 1 & 1 \\ 2 & 5 & 8 \\ -1 & -2 & -3 \end{pmatrix}$$

.82

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -1 & -1 \\ 0 & 0 & 1 \\ -1 & -2 & 1 \end{pmatrix}$$

.83

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 3 & 5 & 6 \\ 1 & 1 & 1 \\ 0 & 1 & 1 \end{pmatrix}$$

.84

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & 1 & 2 \\ 3 & 2 & 4 \\ -4 & -3 & -5 \end{pmatrix}$$

.85

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -2 & -2 & -5 \\ 1 & 2 & 4 \\ -1 & -1 & -3 \end{pmatrix}$$

.86

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -1 & 2 \\ 0 & 1 & -3 \\ 0 & 0 & -1 \end{pmatrix}$$

.87

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -1 & -1 \\ 5 & 4 & 6 \\ 2 & 1 & 2 \end{pmatrix}$$

.88

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 5 & 1 & 12 \\ 6 & 1 & 15 \\ -1 & 0 & -2 \end{pmatrix}$$

.89

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -2 & -1 & -5 \\ 3 & 1 & 7 \\ -2 & -1 & -4 \end{pmatrix}$$

.90

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 1 & 2 & 1 \\ -1 & -1 & -1 \\ -2 & -3 & -1 \end{pmatrix}$$

.91

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -2 & -3 & 0 \\ 2 & 3 & 1 \\ 1 & 1 & 1 \end{pmatrix}$$

.92

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -1 & 0 & 1 \\ 1 & -1 & -3 \\ -1 & 0 & 0 \end{pmatrix}$$

.93

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 1 & 3 & 10 \\ 1 & 2 & 7 \\ 0 & 0 & -1 \end{pmatrix}$$

.94

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 3 & 2 & 5 \\ -4 & -3 & -6 \\ -2 & -1 & -3 \end{pmatrix}$$

.95

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 0 & 0 & 1 \\ -1 & -2 & -1 \\ 1 & 3 & 0 \end{pmatrix}$$

.96

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -1 & -1 \\ 1 & 4 & 6 \\ 2 & 6 & 9 \end{pmatrix}$$

.97

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & -1 & 2 \\ -2 & 0 & -3 \\ -2 & 1 & -3 \end{pmatrix}$$

.98

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 3 & -2 & -1 \\ 1 & -1 & 0 \\ 1 & -1 & -1 \end{pmatrix}$$

.99

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 0 & -1 & -1 \\ 0 & 1 & 2 \\ 1 & -1 & 0 \end{pmatrix}$$

.100

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 5 & 1 & 6 \\ -13 & -3 & -15 \\ 1 & 0 & 1 \end{pmatrix}$$

.101

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 2 & 2 & 3 \\ -1 & -1 & -1 \\ 4 & 3 & 6 \end{pmatrix}$$

.102

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 1 & 1 \\ 0 & 3 & 2 \\ 1 & 1 & 1 \end{pmatrix}$$

.103

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 0 & -1 & 0 \\ -1 & -1 & 0 \\ 0 & 1 & 1 \end{pmatrix}$$

.104

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 2 & 3 \\ -3 & -5 & -7 \\ 2 & 4 & 5 \end{pmatrix}$$

.105

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 3 & -1 & 2 \\ 0 & 0 & 1 \\ 2 & -1 & 1 \end{pmatrix}$$

.106

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -3 & 1 & 2 \\ -1 & 0 & 0 \\ -6 & 2 & 3 \end{pmatrix}$$

.107

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 0 & -1 & 0 \\ 0 & 2 & 1 \\ -1 & 2 & 0 \end{pmatrix}$$

.108

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 0 & 1 & 2 \\ 1 & 3 & 8 \\ 1 & 3 & 9 \end{pmatrix}$$

.109

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -3 & -1 & -6 \\ 1 & 0 & 1 \\ -3 & -1 & -5 \end{pmatrix}$$

.110

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} -2 & -3 & -4 \\ 0 & 1 & 1 \\ -3 & -3 & -5 \end{pmatrix}$$

.111

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -2 & -3 & -1 \\ -1 & -2 & -1 \\ 2 & 3 & 0 \end{pmatrix}$$

.112

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 2 & -1 & 4 \\ 0 & 0 & -1 \\ 1 & 0 & 1 \end{pmatrix}$$

.113

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 0 & -1 \\ -1 & -1 & -3 \\ 1 & 0 & 2 \end{pmatrix}$$

.114

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 0 & 1 & -1 \\ -1 & 0 & -2 \\ -2 & 0 & -3 \end{pmatrix}$$

.115

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 1 & -3 \\ 1 & 0 & 3 \\ -1 & 0 & -2 \end{pmatrix}$$

.116

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 0 & 1 & -1 \\ -1 & 0 & -2 \\ 0 & 0 & -1 \end{pmatrix}$$

.117

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -1 & 0 \\ -1 & 6 & -2 \\ 1 & -8 & 3 \end{pmatrix}$$

.118

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 0 & 1 \\ -1 & -1 & -4 \\ 1 & 0 & 1 \end{pmatrix}$$

.119

$$J = \operatorname{diag}(J_3(0))$$
$$P = \begin{pmatrix} 1 & -7 & -5 \\ 2 & -12 & -9 \\ 0 & 1 & 1 \end{pmatrix}$$

.120

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -4 & -2 & -3 \\ 1 & 0 & 1 \\ 5 & 3 & 3 \end{pmatrix}$$

.121

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 11 & 30 & 1 & 34 \\ 8 & 21 & 1 & 24 \\ 3 & 8 & 0 & 9 \\ 2 & 6 & 0 & 7 \end{pmatrix}$$

.122

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 2 & 3 & 3 \\ -1 & -5 & -7 & -9 \\ 0 & -2 & -3 & -4 \\ -1 & -4 & -6 & -7 \end{pmatrix}$$

.123

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} -14 & -8 & -12 & -15 \\ 3 & 2 & 3 & 3 \\ -7 & -4 & -6 & -7 \\ -8 & -5 & -7 & -8 \end{pmatrix}$$

.124

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & 2 & 3 & 3 \\ 2 & 2 & 3 & 2 \\ 1 & 2 & 3 & 3 \\ 0 & -1 & -1 & -2 \end{pmatrix}$$

.125

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 11 & 2 & 14 & 17 \\ 8 & 2 & 11 & 13 \\ 6 & 1 & 7 & 9 \\ -4 & -1 & -6 & -7 \end{pmatrix}$$

.126

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -3 & -3 & -5 & -4 \\ 3 & 4 & 4 & 5 \\ 0 & 0 & 1 & 0 \\ -1 & -1 & -2 & -1 \end{pmatrix}$$

.127

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} 12 & -4 & 1 & 19 \\ -4 & 2 & 0 & -7 \\ -3 & 1 & 0 & -5 \\ 7 & -2 & 1 & 11 \end{pmatrix}$$

.128

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} -13 & -22 & -8 & -23 \\ -3 & -5 & -2 & -5 \\ 1 & 2 & 1 & 2 \\ 6 & 11 & 4 & 11 \end{pmatrix}$$

.129

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 3 & 0 & 4 \\ 0 & 1 & 0 & 1 \\ -5 & -13 & -3 & -14 \\ -3 & -7 & -2 & -7 \end{pmatrix}$$

.130

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 7 & 6 & 4 & 7 \\ 26 & 22 & 15 & 27 \\ 5 & 4 & 3 & 5 \\ 25 & 21 & 14 & 26 \end{pmatrix}$$

.131

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} -1 & -7 & -3 & -8 \\ 2 & 16 & 7 & 19 \\ 0 & -1 & 0 & -1 \\ 4 & 33 & 15 & 39 \end{pmatrix}$$

.132

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -1 & 0 & 0 \\ 2 & 3 & -2 & -2 \\ -1 & -2 & 1 & 0 \\ 0 & 0 & 1 & 1 \end{pmatrix}$$

.133

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -2 & -3 & -3 \\ -1 & -2 & -4 & -4 \\ -11 & -19 & -35 & -36 \\ 9 & 16 & 29 & 30 \end{pmatrix}$$

.134

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -9 & -5 & -6 & -11 \\ -5 & -4 & -4 & -7 \\ 19 & 12 & 13 & 24 \\ -3 & -2 & -2 & -4 \end{pmatrix}$$

.135

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} -3 & -2 & -1 & -4 \\ -11 & -6 & -2 & -14 \\ 5 & 3 & 1 & 6 \\ -7 & -4 & -1 & -9 \end{pmatrix}$$

.136

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 0 & -1 & 0 \\ 2 & -1 & 1 & 0 \\ 1 & 0 & 1 & -1 \\ 0 & -1 & 0 & 0 \end{pmatrix}$$

.137

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 5 & 1 & -1 & 7 \\ 1 & 0 & -1 & 1 \\ 6 & 1 & 0 & 9 \\ 0 & 0 & 1 & 1 \end{pmatrix}$$

.138

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 7 & 11 & 9 & 15 \\ 6 & 9 & 7 & 12 \\ 2 & 4 & 3 & 5 \\ -1 & -1 & -1 & -2 \end{pmatrix}$$

.139

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -5 & -4 & -37 & -10 \\ 4 & 3 & 30 & 8 \\ 8 & 6 & 57 & 15 \\ -1 & -1 & -8 & -2 \end{pmatrix}$$

.140

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} -1 & -1 & -1 & -1 \\ 4 & 4 & 3 & 7 \\ 9 & 10 & 7 & 18 \\ -1 & -1 & -1 & -2 \end{pmatrix}$$

.141

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 0 & -1 & 0 \\ -1 & 1 & 0 & 1 \\ 0 & 0 & -1 & 0 \\ -1 & 1 & 0 & 0 \end{pmatrix}$$

.142

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 3 & 1 & 3 \\ -1 & -4 & -1 & -4 \\ 3 & 15 & 4 & 16 \\ -3 & -13 & -3 & -14 \end{pmatrix}$$

.143

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} -1 & 4 & 1 & 1 \\ 0 & -4 & -1 & -1 \\ -1 & 6 & 2 & 1 \\ -1 & 9 & 3 & 2 \end{pmatrix}$$

.144

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 1 & -2 & 1 \\ 0 & -1 & 0 & -1 \\ 0 & 2 & -1 & 3 \\ 1 & 1 & 1 & 1 \end{pmatrix}$$

.145

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 40 & 5 & 13 & 41 \\ -33 & -4 & -11 & -34 \\ -39 & -5 & -13 & -40 \\ -30 & -4 & -10 & -31 \end{pmatrix}$$

.146

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -2 & -2 & -4 \\ -2 & -5 & -4 & -8 \\ -1 & -3 & -3 & -5 \\ 3 & 5 & 4 & 9 \end{pmatrix}$$

.147

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 3 & 1 & 5 \\ -1 & -2 & -3 & -2 \\ 0 & -1 & -1 & -1 \\ 0 & -3 & -2 & -4 \end{pmatrix}$$

.148

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & 3 & 1 & 3 \\ -5 & -6 & -3 & -6 \\ 8 & 9 & 5 & 10 \\ 4 & 4 & 3 & 5 \end{pmatrix}$$

.149

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & 4 & 3 & 9 \\ 0 & 0 & -1 & 0 \\ -1 & -3 & -3 & -6 \\ -1 & -2 & -2 & -5 \end{pmatrix}$$

.150

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 2 & 4 & -1 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & -1 & 1 \\ 0 & 1 & 3 & -2 \end{pmatrix}$$

.151

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & 1 & 5 & 6 \\ 4 & 2 & 10 & 13 \\ -5 & -2 & -11 & -15 \\ 4 & 2 & 9 & 12 \end{pmatrix}$$

.152

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -3 & 1 & -2 & -3 \\ -4 & 1 & -5 & -7 \\ 4 & -1 & 4 & 6 \\ -1 & 0 & -1 & -1 \end{pmatrix}$$

.153

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -2 & -3 & -3 \\ 2 & 3 & 4 & 2 \\ -1 & -1 & -2 & -1 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

.154

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} -2 & -12 & -3 & -18 \\ 1 & 6 & 2 & 9 \\ 0 & -1 & 0 & -1 \\ 0 & 2 & 0 & 3 \end{pmatrix}$$

.155

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 2 & 0 & 3 \\ 2 & 3 & 1 & 8 \\ 0 & 0 & 0 & 1 \\ -3 & -4 & -1 & -11 \end{pmatrix}$$

.156

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} 0 & 0 & 2 & 1 \\ 1 & -2 & 3 & 5 \\ 0 & 1 & -3 & -3 \\ -1 & 2 & -2 & -5 \end{pmatrix}$$

.157

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} -4 & -2 & -3 & -7 \\ -11 & -6 & -9 & -18 \\ -1 & -1 & -1 & -2 \\ 3 & 2 & 3 & 5 \end{pmatrix}$$

.158

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & -4 & -9 & -6 \\ 1 & -2 & -5 & -4 \\ -1 & 2 & 5 & 3 \\ -3 & 7 & 16 & 12 \end{pmatrix}$$

.159

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 4 & -14 & -23 & 17 \\ -1 & 3 & 5 & -4 \\ -6 & 20 & 33 & -24 \\ -7 & 24 & 40 & -29 \end{pmatrix}$$

.160

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} -2 & -1 & -1 & -3 \\ 20 & 8 & 10 & 27 \\ 19 & 8 & 10 & 26 \\ -27 & -11 & -14 & -37 \end{pmatrix}$$

.161

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} -5 & -8 & 2 & 12 \\ -6 & -9 & 2 & 13 \\ 3 & 4 & -1 & -5 \\ -3 & -5 & 1 & 7 \end{pmatrix}$$

.162

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 1 & 0 & 1 \\ 3 & 3 & 2 & 6 \\ 2 & 2 & 1 & 3 \\ 3 & 2 & 1 & 4 \end{pmatrix}$$

.163

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 9 & 11 & 8 & 14 \\ 3 & 4 & 3 & 5 \\ 4 & 5 & 3 & 6 \\ 18 & 22 & 15 & 27 \end{pmatrix}$$

.164

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 10 & 1 & 15 & 17 \\ 4 & 0 & 5 & 6 \\ 5 & 0 & 7 & 8 \\ -1 & 0 & -1 & -1 \end{pmatrix}$$

.165

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} 1 & 2 & 0 & 4 \\ -3 & -5 & -1 & -11 \\ 8 & 13 & 2 & 27 \\ -3 & -5 & -1 & -10 \end{pmatrix}$$

.166

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 4 & 3 & 1 & 5 \\ -1 & -1 & 0 & -1 \\ -16 & -12 & -3 & -18 \\ 19 & 14 & 3 & 21 \end{pmatrix}$$

.167

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 1 & -1 & 3 \\ 5 & 3 & 1 & 10 \\ 2 & 1 & 1 & 3 \\ 4 & 3 & 0 & 9 \end{pmatrix}$$

.168

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} 1 & 2 & 1 & 3 \\ 0 & 0 & 1 & 0 \\ 0 & 1 & 0 & 1 \\ 0 & 0 & 0 & -1 \end{pmatrix}$$

.169

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -1 & 0 & 0 \\ 1 & 2 & 1 & 3 \\ 3 & 6 & 2 & 7 \\ -6 & -11 & -4 & -15 \end{pmatrix}$$

.170

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} 1 & 1 & 1 & 2 \\ 8 & 5 & 4 & 15 \\ 13 & 8 & 7 & 24 \\ 2 & 1 & 1 & 4 \end{pmatrix}$$

.171

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} 3 & 5 & -3 & 6 \\ -3 & -4 & 1 & -5 \\ -1 & -1 & -1 & -1 \\ 4 & 5 & -1 & 6 \end{pmatrix}$$

.172

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} -1 & 1 & 2 & 0 \\ 1 & -1 & -3 & 0 \\ 1 & 1 & 1 & 1 \\ -1 & 0 & 1 & -1 \end{pmatrix}$$

.173

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} -2 & -1 & 0 & -3 \\ -2 & -2 & -1 & -4 \\ 0 & 0 & 0 & -1 \\ 3 & 2 & 1 & 6 \end{pmatrix}$$

.174

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -2 & -2 & 0 & -3 \\ 3 & 2 & 3 & 3 \\ 0 & 1 & -1 & 1 \\ 3 & 2 & 2 & 3 \end{pmatrix}$$

.175

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} 0 & -1 & 0 & 0 \\ -2 & 1 & -2 & -3 \\ 4 & 1 & 3 & 5 \\ 1 & 0 & 1 & 1 \end{pmatrix}$$

.176

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -5 & -2 & -3 & -8 \\ -5 & -2 & -3 & -7 \\ 1 & 0 & 0 & 1 \\ -4 & -1 & -2 & -6 \end{pmatrix}$$

.177

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 1 & 3 & 4 \\ -2 & -1 & -6 & -8 \\ 0 & 0 & 1 & 2 \\ 1 & 1 & 2 & 3 \end{pmatrix}$$

.178

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} -5 & -1 & -3 & -5 \\ -9 & -2 & -4 & -10 \\ -5 & -1 & -2 & -6 \\ -3 & -1 & -1 & -4 \end{pmatrix}$$

.179

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -7 & -13 & -11 & -9 \\ -3 & -6 & -5 & -4 \\ 8 & 14 & 12 & 9 \\ -5 & -9 & -8 & -6 \end{pmatrix}$$

.180

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} -2 & 1 & -3 & 2 \\ 1 & 1 & 2 & 1 \\ 1 & 0 & 2 & -1 \\ -2 & 0 & -4 & 1 \end{pmatrix}$$

.181

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & 2 & 3 & 3 \\ 0 & 1 & 1 & 1 \\ 3 & 3 & 5 & 5 \\ -11 & -12 & -18 & -19 \end{pmatrix}$$

.182

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -8 & 3 & 14 & 18 \\ 3 & -1 & -5 & -7 \\ -5 & 2 & 9 & 12 \\ -6 & 2 & 11 & 14 \end{pmatrix}$$

.183

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -1 & -1 & -2 \\ 5 & 2 & 3 & 8 \\ -3 & -1 & -2 & -5 \\ 3 & 1 & 2 & 4 \end{pmatrix}$$

.184

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} -3 & -3 & -2 & -4 \\ 7 & 6 & 5 & 11 \\ 0 & 0 & 0 & 1 \\ -1 & -1 & -1 & -2 \end{pmatrix}$$

.185

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 0 & 1 & -2 \\ -5 & -1 & -1 & -6 \\ 3 & 1 & 1 & 3 \\ -2 & 0 & 1 & -3 \end{pmatrix}$$

.186

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 0 & 3 & 2 \\ 0 & 0 & -1 & -1 \\ 2 & 1 & 3 & 4 \\ 2 & 1 & 4 & 4 \end{pmatrix}$$

.187

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -3 & -1 & -4 \\ 1 & 3 & 0 & 3 \\ 0 & -1 & -1 & -3 \\ 2 & 5 & 1 & 6 \end{pmatrix}$$

.188

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 0 & 3 & 0 \\ -1 & 1 & 12 & 3 \\ 1 & 0 & -6 & -1 \\ 0 & 0 & 4 & 1 \end{pmatrix}$$

.189

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -2 & -3 & -1 & 0 \\ -1 & -1 & -1 & -1 \\ 2 & 2 & 1 & 1 \\ -1 & 0 & -1 & -1 \end{pmatrix}$$

.190

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} 2 & 3 & 3 & 4 \\ 4 & 7 & 6 & 11 \\ -2 & -3 & -3 & -5 \\ 5 & 9 & 8 & 14 \end{pmatrix}$$

.191

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -4 & -3 & -4 & -6 \\ 28 & 22 & 29 & 41 \\ -9 & -7 & -9 & -13 \\ -3 & -2 & -3 & -4 \end{pmatrix}$$

.192

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -28 & -13 & 1 & -32 \\ 30 & 14 & -1 & 34 \\ -6 & -3 & 0 & -7 \\ 21 & 10 & -1 & 24 \end{pmatrix}$$

.193

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} 6 & 3 & 3 & 7 \\ 5 & 2 & 4 & 7 \\ 3 & 1 & 2 & 4 \\ -9 & -4 & -6 & -12 \end{pmatrix}$$

.194

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} -1 & -3 & -8 & -21 \\ 0 & 0 & -1 & -3 \\ 0 & 1 & 2 & 6 \\ -1 & -2 & -5 & -13 \end{pmatrix}$$

.195

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} -1 & 0 & -3 & 0 \\ -5 & -2 & -11 & -5 \\ -2 & -1 & -5 & -2 \\ 2 & 1 & 4 & 2 \end{pmatrix}$$

.196

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} 0 & 2 & 3 & 3 \\ 1 & 2 & 1 & 0 \\ 0 & -1 & -2 & -3 \\ 0 & -1 & -2 & -2 \end{pmatrix}$$

.197

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 10 & 1 & 7 & 21 \\ -16 & -2 & -11 & -33 \\ -9 & -1 & -6 & -18 \\ 8 & 1 & 6 & 17 \end{pmatrix}$$

.198

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 0 & -1 & 3 \\ 0 & 0 & 0 & -1 \\ -1 & 0 & 0 & -3 \\ 0 & -1 & -1 & 0 \end{pmatrix}$$

.199

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -4 & -12 & -13 & -18 \\ -2 & -6 & -6 & -9 \\ -1 & -4 & -4 & -6 \\ -2 & -5 & -6 & -8 \end{pmatrix}$$

.200

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} -3 & -1 & -2 & -5 \\ -14 & -6 & -9 & -25 \\ -2 & -1 & -1 & -3 \\ -7 & -3 & -5 & -13 \end{pmatrix}$$

.201

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 1 & 2 & -1 \\ 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & -1 \\ -1 & 2 & 3 & 0 \end{pmatrix}$$

.202

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} 0 & 1 & 0 & -1 \\ -2 & 0 & 0 & -3 \\ 2 & -2 & -1 & 5 \\ -3 & 3 & 1 & -8 \end{pmatrix}$$

.203

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & 2 & 1 & 5 \\ 0 & 1 & 0 & -1 \\ 3 & 2 & 1 & 8 \\ 0 & -1 & 0 & 2 \end{pmatrix}$$

.204

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} -11 & -7 & -1 & -13 \\ -2 & -1 & 0 & -3 \\ 3 & 2 & 0 & 4 \\ -14 & -9 & -1 & -16 \end{pmatrix}$$

.205

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 3 & 15 & 8 & 18 \\ 4 & 17 & 9 & 20 \\ 2 & 9 & 5 & 11 \\ 0 & -2 & -1 & -3 \end{pmatrix}$$

.206

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & 1 & 0 & 2 \\ 2 & 2 & 1 & 6 \\ -1 & -1 & 0 & -3 \\ 1 & 0 & 0 & 2 \end{pmatrix}$$

.207

$$J = \operatorname{diag}(J_2(0), J_2(0))$$
$$P = \begin{pmatrix} -1 & -15 & -11 & -18 \\ 0 & 1 & 1 & 1 \\ 0 & 4 & 3 & 5 \\ 0 & 2 & 1 & 2 \end{pmatrix}$$

.208

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -29 & -17 & -8 & -31 \\ 14 & 8 & 4 & 15 \\ 37 & 22 & 10 & 40 \\ -41 & -24 & -11 & -44 \end{pmatrix}$$

.209

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -8 & -11 & -7 & -16 \\ 10 & 15 & 9 & 21 \\ -2 & -3 & -2 & -4 \\ -3 & -4 & -3 & -6 \end{pmatrix}$$

.210

$$J = \operatorname{diag}(J_4(0))$$
$$P = \begin{pmatrix} -16 & -12 & -1 & -21 \\ -9 & -7 & -1 & -12 \\ 3 & 2 & 0 & 4 \\ 30 & 22 & 2 & 39 \end{pmatrix}$$

.211

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -2 & -1 & -1 & -2 \\ -4 & -2 & -1 & -4 \\ 1 & -1 & -2 & 0 \\ 0 & 1 & 2 & 1 \end{pmatrix}$$

.212

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -4 & -6 & -7 & -12 \\ 3 & 4 & 6 & 9 \\ 5 & 8 & 9 & 16 \\ -5 & -7 & -9 & -15 \end{pmatrix}$$

.213

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 17 & 5 & 4 & 20 \\ 1 & 0 & 0 & 1 \\ 2 & 1 & 1 & 2 \\ -11 & -3 & -2 & -13 \end{pmatrix}$$

.214

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -2 & -3 & -4 \\ 1 & 24 & 30 & 43 \\ 0 & -5 & -6 & -9 \\ 0 & -4 & -5 & -7 \end{pmatrix}$$

.215

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 6 & 6 & 3 & 8 \\ -9 & -8 & -3 & -12 \\ -2 & -2 & -1 & -3 \\ 10 & 9 & 4 & 13 \end{pmatrix}$$

.216

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} -4 & -3 & -2 & -5 \\ 4 & 3 & 2 & 6 \\ 5 & 4 & 2 & 6 \\ 2 & 2 & 1 & 2 \end{pmatrix}$$

.217

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 32 & 50 & 12 & 61 \\ -11 & -17 & -4 & -21 \\ 29 & 45 & 11 & 55 \\ -5 & -8 & -2 & -10 \end{pmatrix}$$

.218

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & 4 & 10 & 13 \\ -2 & -5 & -12 & -15 \\ -1 & -1 & -2 & -3 \\ 0 & -1 & -3 & -3 \end{pmatrix}$$

.219

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 0 & -1 & -2 \\ 1 & 2 & 5 & 7 \\ 0 & 0 & 0 & -1 \\ -2 & -3 & -9 & -14 \end{pmatrix}$$

.220

$$J = \operatorname{diag}(J_3(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -1 & 1 & -1 \\ -3 & -3 & 1 & -4 \\ 3 & 2 & 1 & 3 \\ -1 & 0 & -2 & 0 \end{pmatrix}$$

.221

$$J = \operatorname{diag}(J_3(0), J_2(0))$$
$$P = \begin{pmatrix} -2 & -8 & -12 & -8 & -19 \\ 4 & 16 & 22 & 15 & 36 \\ 3 & 12 & 16 & 11 & 27 \\ 2 & 9 & 12 & 8 & 20 \\ -5 & -19 & -27 & -18 & -44 \end{pmatrix}$$

.222

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} 1 & 0 & 4 & 2 & 6 \\ -2 & -1 & -7 & -5 & -7 \\ 0 & 0 & -1 & 0 & -3 \\ -4 & -2 & -14 & -9 & -16 \\ 1 & 1 & 2 & 2 & 1 \end{pmatrix}$$

.223

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 4 & 6 & 1 & 6 & 7 \\ 25 & 34 & 5 & 35 & 42 \\ -10 & -13 & -2 & -14 & -17 \\ 13 & 17 & 3 & 18 & 22 \\ 23 & 31 & 5 & 32 & 39 \end{pmatrix}$$

.224

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 6 & 2 & 1 & 5 & 12 \\ 7 & 2 & 1 & 6 & 13 \\ 8 & 3 & 1 & 6 & 16 \\ -1 & 0 & 0 & -1 & -2 \\ 15 & 5 & 2 & 13 & 29 \end{pmatrix}$$

.225

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} -2 & -3 & -3 & -6 & -8 \\ -1 & -2 & -2 & -5 & -6 \\ -3 & -7 & -5 & -15 & -19 \\ 1 & 2 & 1 & 3 & 4 \\ -4 & -7 & -6 & -15 & -19 \end{pmatrix}$$

.226

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 8 & 26 & 3 & 16 & 35 \\ -6 & -20 & -2 & -12 & -27 \\ -6 & -19 & -2 & -12 & -26 \\ -5 & -17 & -2 & -10 & -23 \\ 1 & 4 & 0 & 3 & 6 \end{pmatrix}$$

.227

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -4 & 3 & -3 & -2 \\ 0 & 1 & 0 & 1 & 0 \\ 1 & 5 & -2 & 4 & 5 \\ 0 & -2 & 2 & -1 & -2 \\ 1 & 1 & 1 & 1 & 2 \end{pmatrix}$$

.228

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 20 & 23 & 54 & 26 & 64 \\ -8 & -9 & -21 & -10 & -25 \\ -22 & -25 & -60 & -29 & -71 \\ -21 & -24 & -58 & -28 & -69 \\ 14 & 16 & 37 & 18 & 44 \end{pmatrix}$$

.229

$$J = \operatorname{diag}(J_3(0), J_2(0))$$
$$P = \begin{pmatrix} 22 & 19 & 18 & 29 & 36 \\ 47 & 41 & 39 & 62 & 77 \\ 18 & 16 & 15 & 24 & 30 \\ -7 & -6 & -6 & -9 & -12 \\ -23 & -20 & -19 & -30 & -38 \end{pmatrix}$$

.230

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} -1 & -3 & -1 & -5 & -5 \\ -3 & -13 & -4 & -18 & -21 \\ 1 & 7 & 2 & 8 & 10 \\ 2 & 7 & 2 & 11 & 12 \\ 2 & 7 & 2 & 10 & 11 \end{pmatrix}$$

.231

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -37 & -15 & -34 & -32 & -38 \\ 7 & 3 & 6 & 6 & 7 \\ 39 & 16 & 35 & 34 & 40 \\ 36 & 15 & 32 & 31 & 37 \\ -31 & -13 & -28 & -27 & -32 \end{pmatrix}$$

.232

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} -4 & -15 & -14 & -13 & -26 \\ -4 & -16 & -13 & -12 & -27 \\ -1 & -3 & -3 & -3 & -5 \\ 5 & 18 & 16 & 15 & 31 \\ -8 & -30 & -26 & -24 & -51 \end{pmatrix}$$

.233

$$J = \operatorname{diag}(J_3(0), J_2(0))$$
$$P = \begin{pmatrix} 3 & 1 & 2 & 0 & 3 \\ 3 & 0 & 1 & 1 & 3 \\ -4 & -2 & -3 & 1 & -5 \\ 6 & 0 & 2 & 3 & 6 \\ 6 & 2 & 4 & 0 & 7 \end{pmatrix}$$

.234

$$J = \operatorname{diag}(J_5(0))$$

$$P = \begin{pmatrix} 4 & 1 & 2 & 4 & 5 \\ 22 & 3 & 9 & 18 & 27 \\ 8 & 1 & 3 & 6 & 10 \\ -36 & -6 & -15 & -31 & -44 \\ 31 & 5 & 13 & 27 & 38 \end{pmatrix}$$

.235

$$J = \operatorname{diag}(J_3(0), J_2(0))$$

$$P = \begin{pmatrix} -3 & -9 & -3 & -9 & -11 \\ 4 & 13 & 5 & 14 & 16 \\ 7 & 23 & 8 & 24 & 28 \\ 2 & 7 & 3 & 8 & 9 \\ 9 & 28 & 10 & 30 & 35 \end{pmatrix}$$

.236

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} 3 & 2 & 3 & 5 & 3 \\ 2 & 1 & 2 & 4 & 1 \\ 1 & 1 & 2 & 3 & 0 \\ 0 & -1 & 1 & 3 & -3 \\ 2 & 1 & 3 & 5 & 0 \end{pmatrix}$$

.237

$$J = \operatorname{diag}(J_4(0), J_1(0))$$

$$P = \begin{pmatrix} -5 & -2 & -4 & -1 & -6 \\ -12 & -5 & -9 & -2 & -14 \\ 21 & 10 & 16 & 4 & 25 \\ 42 & 19 & 32 & 7 & 50 \\ -46 & -21 & -35 & -8 & -55 \end{pmatrix}$$

.238

$$J = \operatorname{diag}(J_4(0), J_1(0))$$

$$P = \begin{pmatrix} -1 & -2 & -1 & -3 & -4 \\ -2 & -3 & -2 & -5 & -6 \\ 3 & 4 & 3 & 7 & 9 \\ -2 & -3 & -1 & -6 & -7 \\ -1 & 0 & 1 & -2 & -2 \end{pmatrix}$$

.239

$$J = \operatorname{diag}(J_5(0))$$

$$P = \begin{pmatrix} -8 & -4 & 9 & -7 & -15 \\ -1 & 0 & 3 & -1 & -3 \\ 2 & 1 & -4 & 2 & 5 \\ 6 & 3 & -7 & 5 & 11 \\ 5 & 2 & -8 & 5 & 11 \end{pmatrix}$$

.240

$$J = \operatorname{diag}(J_3(0), J_2(0))$$

$$P = \begin{pmatrix} -41 & -2 & -6 & -37 & -54 \\ 20 & 1 & 3 & 18 & 26 \\ 22 & 1 & 3 & 20 & 29 \\ 3 & 0 & 0 & 2 & 3 \\ 49 & 2 & 7 & 44 & 64 \end{pmatrix}$$

.241

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -16 & -28 & -11 & -56 & -59 \\ -6 & -11 & -4 & -22 & -23 \\ 1 & 2 & 1 & 4 & 4 \\ -8 & -14 & -5 & -29 & -30 \\ 4 & 7 & 3 & 14 & 15 \end{pmatrix}$$

.242

$$J = \operatorname{diag}(J_5(0))$$

$$P = \begin{pmatrix} -1 & -13 & 0 & -8 & -15 \\ -2 & -18 & -1 & -11 & -20 \\ 0 & -1 & 0 & 0 & -1 \\ -1 & -14 & 0 & -9 & -16 \\ 2 & 14 & 1 & 8 & 15 \end{pmatrix}$$

.243

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -25 & -5 & -6 & -28 & -83 \\ 22 & 4 & 5 & 24 & 71 \\ -21 & -4 & -5 & -23 & -69 \\ 16 & 3 & 4 & 18 & 53 \\ -21 & -4 & -5 & -23 & -68 \end{pmatrix}$$

.244

$$J = \operatorname{diag}(J_5(0))$$

$$P = \begin{pmatrix} 12 & 11 & 6 & 2 & 16 \\ -8 & -8 & -4 & -2 & -11 \\ -25 & -24 & -13 & -6 & -34 \\ -27 & -26 & -14 & -6 & -37 \\ 25 & 24 & 13 & 5 & 34 \end{pmatrix}$$

.245

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 12 & 25 & 2 & 26 & 27 \\ -19 & -39 & -4 & -40 & -42 \\ 35 & 72 & 7 & 74 & 78 \\ -20 & -42 & -4 & -43 & -45 \\ -24 & -49 & -5 & -50 & -53 \end{pmatrix}$$

.246

$$J = \operatorname{diag}(J_5(0))$$

$$P = \begin{pmatrix} -2 & -3 & -16 & -11 & -16 \\ -1 & -1 & -7 & -5 & -7 \\ -1 & -2 & -11 & -7 & -11 \\ 2 & 3 & 20 & 14 & 21 \\ -2 & -3 & -17 & -12 & -17 \end{pmatrix}$$

.247

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 15 & 2 & 15 & 2 & 16 \\ 44 & 4 & 42 & 7 & 47 \\ 1 & -1 & 0 & 1 & 1 \\ 1 & 0 & 1 & 0 & 1 \\ -4 & 0 & -3 & -1 & -4 \end{pmatrix}$$

.248

$$J = \operatorname{diag}(J_3(0), J_2(0))$$

$$P = \begin{pmatrix} -5 & -6 & -4 & -3 & -6 \\ 20 & 21 & 9 & 3 & 23 \\ 6 & 6 & 2 & 0 & 7 \\ -14 & -14 & -5 & 0 & -16 \\ 1 & 1 & 1 & 1 & 1 \end{pmatrix}$$

.249

$$J = \operatorname{diag}(J_3(0), J_2(0))$$
$$P = \begin{pmatrix} 0 & 2 & 2 & 1 & 2 \\ 0 & 0 & 0 & -1 & -1 \\ -1 & -8 & -9 & -8 & -12 \\ 0 & -1 & -2 & -2 & -3 \\ 0 & -1 & -1 & 0 & 0 \end{pmatrix}$$

.250

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 3 & 1 & 12 & 10 & 15 \\ -2 & 0 & -6 & -6 & -7 \\ 0 & 0 & 1 & 1 & 1 \\ 0 & -1 & -3 & -1 & -4 \\ 0 & 1 & 0 & -1 & 1 \end{pmatrix}$$

.251

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} -2 & -1 & -5 & 0 & -3 \\ 5 & 3 & 13 & 0 & 9 \\ -6 & -4 & -17 & -1 & -13 \\ 5 & 3 & 12 & 0 & 8 \\ -5 & -3 & -14 & -1 & -11 \end{pmatrix}$$

.252

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & -2 & -12 & -8 & -21 \\ -2 & 1 & 9 & 6 & 16 \\ 4 & -3 & -22 & -15 & -39 \\ -3 & 2 & 14 & 10 & 25 \\ -2 & 2 & 14 & 9 & 24 \end{pmatrix}$$

.253

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -12 & -32 & -16 & -31 & -34 \\ -8 & -22 & -11 & -21 & -23 \\ 7 & 17 & 9 & 18 & 19 \\ 2 & 6 & 3 & 5 & 6 \\ 12 & 31 & 16 & 32 & 34 \end{pmatrix}$$

.254

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 5 & 25 & 39 & 24 & 46 \\ -3 & -15 & -23 & -14 & -27 \\ 6 & 31 & 48 & 30 & 57 \\ 0 & 2 & 3 & 2 & 4 \\ 1 & 5 & 8 & 5 & 9 \end{pmatrix}$$

.255

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 4 & 6 & 1 & 9 & 5 \\ -2 & -2 & 2 & -6 & -1 \\ 3 & 4 & -1 & 8 & 3 \\ 5 & 8 & 2 & 12 & 7 \\ -1 & -1 & 2 & -4 & 0 \end{pmatrix}$$

.256

$$J = \operatorname{diag}(J_3(0), J_2(0))$$
$$P = \begin{pmatrix} 0 & 1 & 0 & 1 & 1 \\ 2 & 3 & 1 & 4 & 3 \\ 0 & 1 & 1 & 0 & 0 \\ 1 & 1 & 1 & 2 & 0 \\ -1 & -1 & -1 & -1 & 0 \end{pmatrix}$$

.257

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 3 & 1 & 4 & 5 & 7 \\ -7 & -2 & -8 & -10 & -16 \\ 1 & 0 & 1 & 2 & 2 \\ -8 & -2 & -10 & -13 & -19 \\ -3 & -1 & -4 & -5 & -8 \end{pmatrix}$$

.258

$$J = \operatorname{diag}(J_3(0), J_2(0))$$
$$P = \begin{pmatrix} -11 & -9 & -33 & -13 & -36 \\ -3 & -2 & -9 & -3 & -10 \\ 4 & 3 & 11 & 5 & 12 \\ 3 & 3 & 10 & 4 & 11 \\ 11 & 9 & 34 & 13 & 37 \end{pmatrix}$$

.259

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} -2 & -1 & 0 & 4 & -1 \\ -3 & -2 & -2 & 0 & -4 \\ -2 & -1 & -1 & -1 & -3 \\ 4 & 2 & 1 & -2 & 4 \\ -2 & -1 & -1 & 1 & -2 \end{pmatrix}$$

.260

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -2 & -1 & -4 & -3 & -4 \\ 12 & 8 & 33 & 27 & 38 \\ 7 & 5 & 20 & 16 & 23 \\ 4 & 3 & 12 & 10 & 14 \\ 8 & 6 & 23 & 19 & 27 \end{pmatrix}$$

.261

$$J = \operatorname{diag}(J_3(0), J_2(0))$$
$$P = \begin{pmatrix} 10 & 24 & 2 & 13 & 31 \\ -4 & -9 & -1 & -5 & -12 \\ -6 & -15 & -1 & -8 & -20 \\ -6 & -16 & -1 & -8 & -21 \\ -11 & -26 & -2 & -14 & -34 \end{pmatrix}$$

.262

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -5 & 0 & -6 & -3 & -6 \\ 5 & 0 & 4 & 3 & 5 \\ 6 & -1 & 4 & 3 & 6 \\ -2 & -1 & -4 & -2 & -3 \\ 13 & 1 & 15 & 9 & 15 \end{pmatrix}$$

.263

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 6 & 11 & 4 & 13 & 2 \\ -9 & -13 & -5 & -15 & -4 \\ -10 & -14 & -6 & -16 & -5 \\ 11 & 17 & 7 & 20 & 5 \\ -3 & -5 & -2 & -6 & -1 \end{pmatrix}$$

.264

$$J = \operatorname{diag}(J_5(0))$$

$$P = \begin{pmatrix} 2 & -1 & 4 & 3 & 5 \\ 6 & -5 & 13 & 9 & 16 \\ 2 & -2 & 5 & 3 & 6 \\ 1 & -1 & 2 & 2 & 3 \\ -1 & 1 & -3 & -2 & -3 \end{pmatrix}$$

.265

$$J = \operatorname{diag}(J_4(0), J_1(0))$$

$$P = \begin{pmatrix} 10 & 4 & 1 & 19 & 22 \\ 21 & 9 & 2 & 41 & 47 \\ -16 & -7 & -2 & -30 & -35 \\ -9 & -4 & -1 & -16 & -19 \\ 37 & 16 & 4 & 70 & 81 \end{pmatrix}$$

.266

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 1 & 0 & 1 & 1 & 1 \\ -10 & -1 & -9 & -10 & -11 \\ -36 & -4 & -30 & -33 & -38 \\ 25 & 3 & 22 & 25 & 27 \\ 28 & 3 & 24 & 27 & 30 \end{pmatrix}$$

.267

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 2 & 2 & 1 & 2 & 1 \\ 20 & 33 & 14 & 36 & 0 \\ -3 & -4 & -2 & -4 & -1 \\ 13 & 21 & 9 & 23 & 0 \\ 22 & 36 & 15 & 39 & 0 \end{pmatrix}$$

.268

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -29 & -34 & -26 & -36 & -45 \\ -20 & -23 & -18 & -25 & -31 \\ -23 & -27 & -21 & -29 & -36 \\ -4 & -5 & -3 & -5 & -6 \\ 0 & 1 & -1 & 0 & 0 \end{pmatrix}$$

.269

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} -3 & -1 & -2 & -3 & -3 \\ -2 & 0 & -1 & -1 & -2 \\ 2 & 1 & 1 & 2 & 2 \\ -18 & -3 & -8 & -13 & -19 \\ 26 & 4 & 11 & 18 & 28 \end{pmatrix}$$

.270

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} 18 & 17 & 5 & 3 & 23 \\ -4 & -3 & -1 & -1 & -4 \\ -14 & -13 & -4 & -2 & -18 \\ 1 & 1 & 0 & 0 & 1 \\ -12 & -11 & -3 & -2 & -15 \end{pmatrix}$$

.271

$$J = \operatorname{diag}(J_3(0), J_2(0))$$
$$P = \begin{pmatrix} 0 & -8 & -7 & -5 & -11 \\ 1 & 25 & 23 & 16 & 35 \\ 0 & 1 & 1 & 1 & 2 \\ 0 & -2 & -2 & -1 & -3 \\ 0 & -1 & -1 & -1 & -1 \end{pmatrix}$$

.272

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -6 & -14 & -16 & -21 & -1 \\ -1 & -3 & -4 & -6 & 2 \\ -3 & -7 & -8 & -10 & -1 \\ -1 & -2 & -2 & -2 & -2 \\ 0 & -1 & -1 & -2 & 1 \end{pmatrix}$$

.273

$$J = \operatorname{diag}(J_3(0), J_2(0))$$
$$P = \begin{pmatrix} 4 & 9 & 7 & 3 & 14 \\ 4 & 9 & 7 & 2 & 15 \\ 2 & 5 & 4 & 2 & 7 \\ -6 & -12 & -9 & -2 & -21 \\ -1 & -3 & -2 & -1 & -4 \end{pmatrix}$$

.274

$$J = \operatorname{diag}(J_4(0), J_1(0))$$

$$P = \begin{pmatrix} 12 & 13 & 2 & 21 & 24 \\ -6 & -6 & -1 & -10 & -11 \\ 6 & 6 & 1 & 9 & 12 \\ 7 & 7 & 1 & 12 & 13 \\ 7 & 8 & 1 & 13 & 14 \end{pmatrix}$$

.275

$$J = \operatorname{diag}(J_3(0), J_2(0))$$

$$P = \begin{pmatrix} 3 & 0 & 2 & 6 & 6 \\ 6 & 0 & 4 & 11 & 12 \\ 8 & 0 & 5 & 15 & 16 \\ -2 & 0 & -1 & -3 & -3 \\ -17 & -1 & -10 & -31 & -31 \end{pmatrix}$$

.276

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 17 & 9 & 19 & 9 & 20 \\ -5 & -3 & -6 & -3 & -6 \\ 1 & 1 & 1 & 1 & 1 \\ -5 & -3 & -4 & -2 & -5 \\ -2 & -1 & -2 & -1 & -2 \end{pmatrix}$$

.277

$$J = \operatorname{diag}(J_3(0), J_2(0))$$

$$P = \begin{pmatrix} -31 & -22 & -44 & -15 & -56 \\ -10 & -7 & -14 & -5 & -18 \\ -5 & -3 & -7 & -2 & -9 \\ -15 & -11 & -22 & -7 & -28 \\ 2 & 2 & 3 & 1 & 4 \end{pmatrix}$$

.278

$$J = \operatorname{diag}(J_3(0), J_2(0))$$

$$P = \begin{pmatrix} 0 & 4 & 5 & 3 & 5 \\ 0 & 11 & 12 & 8 & 13 \\ 1 & 16 & 20 & 12 & 21 \\ 0 & 3 & 3 & 2 & 3 \\ -1 & -29 & -34 & -21 & -36 \end{pmatrix}$$

.279

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} 1 & 0 & 0 & 2 & 3 \\ 9 & 4 & 1 & 16 & 34 \\ 1 & 1 & 0 & 1 & 4 \\ -10 & -3 & -1 & -19 & -37 \\ 12 & 5 & 1 & 22 & 46 \end{pmatrix}$$

.280

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} -8 & -10 & -3 & -7 & -16 \\ 2 & 3 & 1 & 2 & 4 \\ 2 & 1 & 0 & 1 & 3 \\ 9 & 11 & 3 & 7 & 18 \\ 1 & 0 & 0 & 0 & 1 \end{pmatrix}$$

.281

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -7 & -6 & -3 & -3 & -9 \\ 11 & 9 & 5 & 5 & 14 \\ -7 & -6 & -3 & -4 & -9 \\ -5 & -4 & -2 & -1 & -7 \\ 7 & 6 & 3 & 2 & 10 \end{pmatrix}$$

.282

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} -8 & -10 & 1 & -1 & -12 \\ -18 & -22 & 1 & -2 & -27 \\ 7 & 8 & 0 & 1 & 10 \\ -1 & -1 & 0 & 0 & -1 \\ -8 & -9 & 1 & -1 & -11 \end{pmatrix}$$

.283

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} 11 & 8 & 2 & 11 & 11 \\ -27 & -21 & -3 & -26 & -28 \\ -4 & -3 & -1 & -4 & -4 \\ 29 & 22 & 5 & 29 & 30 \\ -3 & -2 & -2 & -4 & -3 \end{pmatrix}$$

.284

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 2 & 1 & 0 & 4 \\ 0 & -1 & -1 & -1 & -1 \\ 3 & 1 & 2 & 4 & -1 \\ 0 & 3 & 2 & 2 & 4 \\ 2 & -1 & 0 & 1 & -3 \end{pmatrix}$$

.285

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & -1 & 0 & 0 & -1 \\ 1 & -1 & 1 & 0 & 0 \\ -1 & -2 & 0 & -1 & -3 \\ 0 & 1 & 0 & 1 & 1 \\ 1 & 1 & 0 & -1 & 3 \end{pmatrix}$$

.286

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} 3 & 16 & 3 & 33 & 70 \\ -7 & -34 & -6 & -69 & -147 \\ 0 & -1 & 0 & -2 & -4 \\ 1 & 6 & 1 & 13 & 27 \\ -8 & -39 & -7 & -79 & -168 \end{pmatrix}$$

.287

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} 5 & 9 & 5 & 4 & 17 \\ -7 & -11 & -6 & -7 & -20 \\ 9 & 14 & 8 & 9 & 26 \\ -10 & -16 & -9 & -9 & -30 \\ -4 & -7 & -4 & -3 & -13 \end{pmatrix}$$

.288

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 1 & -2 & 0 & 1 & 1 \\ 2 & -6 & 0 & 3 & 5 \\ 0 & -2 & -1 & 1 & 3 \\ -1 & 1 & -1 & 0 & 2 \\ -1 & 4 & 0 & -2 & -3 \end{pmatrix}$$

.289

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & -3 & -3 & 0 & -5 \\ 1 & 2 & 2 & 0 & 3 \\ -2 & -3 & -3 & 0 & -5 \\ -6 & -10 & -10 & -1 & -16 \\ 9 & 17 & 16 & 1 & 27 \end{pmatrix}$$

.290

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} 2 & 3 & 1 & 0 & 6 \\ 0 & -1 & 0 & 1 & -2 \\ 1 & 1 & 1 & 1 & 2 \\ 3 & 2 & 2 & 2 & 5 \\ 0 & 2 & 0 & -2 & 3 \end{pmatrix}$$

.291

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 4 & 5 & 3 & 5 \\ 1 & -35 & -41 & -26 & -43 \\ -2 & 53 & 63 & 40 & 66 \\ 1 & -33 & -39 & -25 & -41 \\ -1 & 32 & 38 & 24 & 40 \end{pmatrix}$$

.292

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 4 & 2 & 6 & 5 & 7 \\ -41 & -14 & -53 & -42 & -65 \\ 11 & 4 & 15 & 12 & 18 \\ -21 & -7 & -27 & -21 & -33 \\ -23 & -7 & -28 & -22 & -35 \end{pmatrix}$$

.293

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} 0 & 0 & 1 & 1 & 1 \\ 1 & 3 & 19 & 27 & 27 \\ 0 & -1 & -4 & -6 & -6 \\ 1 & 4 & 25 & 36 & 36 \\ -2 & -7 & -44 & -62 & -63 \end{pmatrix}$$

.294

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} 44 & 39 & 18 & 5 & 59 \\ -24 & -21 & -10 & -3 & -32 \\ -16 & -14 & -7 & -3 & -21 \\ -17 & -15 & -7 & -2 & -23 \\ 18 & 16 & 8 & 3 & 24 \end{pmatrix}$$

.295

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 25 & 73 & 27 & 65 & 110 \\ -20 & -59 & -22 & -53 & -89 \\ -18 & -54 & -20 & -48 & -81 \\ 22 & 65 & 24 & 58 & 98 \\ -35 & -103 & -38 & -92 & -155 \end{pmatrix}$$

.296

$$J = \operatorname{diag}(J_3(0), J_2(0))$$
$$P = \begin{pmatrix} -4 & -1 & -5 & -7 & -7 \\ -10 & -3 & -12 & -17 & -18 \\ -13 & -4 & -15 & -21 & -23 \\ 16 & 5 & 19 & 27 & 28 \\ -3 & -1 & -4 & -5 & -6 \end{pmatrix}$$

.297

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} -1 & -2 & -3 & -3 & -3 \\ 0 & 3 & 2 & 1 & 5 \\ 0 & 3 & 2 & 0 & 5 \\ 0 & -2 & -1 & 0 & -3 \\ 0 & 2 & 1 & 0 & 4 \end{pmatrix}$$

.298

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -10 & -3 & -9 & -8 & -9 \\ -39 & -11 & -34 & -30 & -36 \\ -18 & -5 & -16 & -14 & -17 \\ -12 & -3 & -11 & -9 & -12 \\ -16 & -4 & -14 & -12 & -15 \end{pmatrix}$$

.299

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} 3 & -1 & 6 & 8 & -7 \\ 0 & 0 & 0 & 0 & -1 \\ 3 & -2 & 5 & 7 & -8 \\ 4 & -2 & 8 & 11 & -10 \\ 0 & 0 & -1 & -1 & -1 \end{pmatrix}$$

.300

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 3 & 6 & 1 & 4 & 9 \\ 29 & 60 & 9 & 39 & 86 \\ 9 & 19 & 3 & 12 & 27 \\ -18 & -37 & -6 & -24 & -53 \\ -10 & -20 & -3 & -13 & -29 \end{pmatrix}$$

.301

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} -3 & 1 & -2 & -1 & -4 \\ 4 & -4 & 1 & -2 & 5 \\ 1 & 3 & 2 & 4 & 1 \\ -8 & 1 & -5 & -4 & -10 \\ 0 & -3 & -1 & -3 & 0 \end{pmatrix}$$

.302

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} 11 & 5 & 11 & 6 & 20 \\ 1 & 0 & 1 & 0 & 2 \\ 4 & 2 & 4 & 2 & 7 \\ 21 & 9 & 22 & 11 & 39 \\ -23 & -10 & -24 & -12 & -43 \end{pmatrix}$$

.303

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} -9 & -22 & -1 & -27 & -35 \\ -15 & -35 & -1 & -43 & -56 \\ -9 & -21 & -1 & -26 & -34 \\ -16 & -37 & -1 & -45 & -59 \\ 2 & 6 & 0 & 7 & 9 \end{pmatrix}$$

.304

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -10 & -9 & -8 & -10 & -11 \\ 9 & 8 & 7 & 9 & 10 \\ 7 & 6 & 5 & 7 & 7 \\ 20 & 19 & 17 & 21 & 24 \\ -31 & -28 & -25 & -32 & -35 \end{pmatrix}$$

.305

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -3 & -3 & -8 & -10 & -18 \\ -3 & -3 & -9 & -11 & -21 \\ 3 & 2 & 6 & 7 & 11 \\ 1 & 1 & 3 & 4 & 8 \\ 1 & 0 & 0 & 0 & -3 \end{pmatrix}$$

.306

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} 4 & -2 & -4 & -1 & 4 \\ -1 & 0 & 1 & 0 & -1 \\ 4 & -1 & -2 & 1 & 3 \\ -3 & 1 & 3 & 1 & -3 \\ -3 & 1 & 2 & -1 & -2 \end{pmatrix}$$

.307

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} 10 & 5 & 1 & 6 & 10 \\ 54 & 26 & 6 & 34 & 55 \\ -62 & -30 & -7 & -39 & -63 \\ 17 & 7 & 2 & 11 & 17 \\ 16 & 7 & 2 & 10 & 16 \end{pmatrix}$$

.308

$$J = \operatorname{diag}(J_5(0))$$
$$P = \begin{pmatrix} 69 & 33 & 50 & 7 & 70 \\ 15 & 7 & 11 & 2 & 15 \\ -8 & -4 & -6 & -1 & -8 \\ -13 & -6 & -9 & -1 & -13 \\ 11 & 5 & 8 & 1 & 11 \end{pmatrix}$$

.309

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0))$$
$$P = \begin{pmatrix} -1 & 1 & -3 & -5 & 4 \\ 0 & 1 & -2 & -4 & 4 \\ -3 & -1 & -3 & -4 & 0 \\ -7 & -1 & -8 & -12 & 3 \\ 2 & 1 & 1 & 1 & 2 \end{pmatrix}$$

.310

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} -3 & -3 & -3 & 0 & -4 \\ 4 & 5 & 3 & 1 & 5 \\ -2 & -2 & -1 & 1 & -2 \\ 1 & 1 & 1 & 1 & 1 \\ -1 & -2 & 0 & 0 & -1 \end{pmatrix}$$

.311

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0), J_1(0))$$
$$P = \begin{pmatrix} -4 & -17 & -9 & -18 & -33 \\ -3 & -12 & -6 & -12 & -23 \\ 2 & 8 & 4 & 8 & 15 \\ -1 & -6 & -3 & -7 & -12 \\ 6 & 29 & 15 & 31 & 56 \end{pmatrix}$$

.312

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} -7 & -16 & -7 & -5 & -17 \\ -8 & -16 & -7 & -4 & -18 \\ 4 & 7 & 3 & 1 & 8 \\ 6 & 13 & 6 & 4 & 14 \\ 6 & 12 & 5 & 3 & 13 \end{pmatrix}$$

.313

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} -3 & -3 & -1 & -3 & -3 \\ -4 & -5 & -1 & -4 & -4 \\ 1 & 0 & 0 & 1 & 0 \\ 0 & -1 & 0 & 0 & -1 \\ -5 & -4 & -2 & -6 & -4 \end{pmatrix}$$

.314

$$J = \operatorname{diag}(J_5(0))$$

$$P = \begin{pmatrix} 2 & 2 & -1 & 2 & 6 \\ -9 & -10 & 7 & -7 & -26 \\ 2 & 3 & -2 & 2 & 6 \\ -6 & -6 & 4 & -5 & -18 \\ 5 & 6 & -4 & 4 & 15 \end{pmatrix}$$

.315

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -2 & -13 & -5 & -17 & -45 \\ 1 & 8 & 3 & 10 & 27 \\ -1 & -6 & -2 & -8 & -21 \\ -1 & -10 & -4 & -13 & -36 \\ 0 & 2 & 1 & 2 & 7 \end{pmatrix}$$

.316

$$J = \operatorname{diag}(J_4(0), J_1(0))$$

$$P = \begin{pmatrix} -4 & -6 & -20 & -9 & -21 \\ 2 & 2 & 7 & 3 & 7 \\ 2 & 3 & 11 & 5 & 12 \\ -6 & -10 & -34 & -15 & -36 \\ 5 & 8 & 27 & 12 & 28 \end{pmatrix}$$

.317

$$J = \operatorname{diag}(J_4(0), J_1(0))$$

$$P = \begin{pmatrix} -1 & -1 & -1 & -1 & -1 \\ 4 & 1 & 5 & 7 & 1 \\ 2 & 1 & 2 & 3 & 1 \\ 4 & 0 & 5 & 7 & 0 \\ 0 & -1 & -1 & -1 & 0 \end{pmatrix}$$

.318

$$J = \operatorname{diag}(J_4(0), J_1(0))$$

$$P = \begin{pmatrix} -68 & -30 & -63 & -45 & -95 \\ 15 & 7 & 14 & 10 & 21 \\ -13 & -6 & -12 & -9 & -18 \\ -45 & -20 & -42 & -30 & -63 \\ 41 & 18 & 38 & 27 & 57 \end{pmatrix}$$

.319

$$J = \operatorname{diag}(J_3(0), J_2(0))$$

$$P = \begin{pmatrix} -12 & -19 & 0 & -9 & -27 \\ -17 & -26 & -1 & -13 & -38 \\ 9 & 13 & 1 & 7 & 20 \\ -10 & -16 & 0 & -8 & -23 \\ 8 & 11 & 1 & 6 & 17 \end{pmatrix}$$

.320

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} -2 & -19 & -8 & -8 & -21 \\ 1 & 8 & 4 & 3 & 9 \\ 5 & 42 & 18 & 17 & 46 \\ 1 & 13 & 5 & 6 & 14 \\ -6 & -51 & -22 & -21 & -56 \end{pmatrix}$$

.321

$$J = \operatorname{diag}(J_4(0), J_2(0))$$

$$P = \begin{pmatrix} -2 & -13 & -82 & -57 & -23 & -121 \\ 1 & 4 & 25 & 18 & 7 & 37 \\ 0 & 1 & 6 & 4 & 2 & 9 \\ 1 & 7 & 46 & 32 & 13 & 68 \\ -1 & -6 & -39 & -27 & -11 & -58 \\ 0 & -1 & -7 & -5 & -2 & -11 \end{pmatrix}$$

.322

$$J = \operatorname{diag}(J_5(0), J_1(0))$$

$$P = \begin{pmatrix} -3 & 5 & 7 & 8 & 9 & -2 \\ -1 & 2 & 3 & 4 & 4 & -1 \\ -1 & 1 & 2 & 3 & 2 & -2 \\ -1 & 2 & 3 & 3 & 4 & 0 \\ 1 & -2 & -2 & -2 & -3 & -1 \\ 0 & -1 & -1 & -2 & -1 & -1 \end{pmatrix}$$

.323

$$J = \operatorname{diag}(J_4(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 4 & 8 & 7 & -1 & -1 & 9 \\ -7 & -15 & -13 & -1 & -3 & -17 \\ -2 & -5 & -4 & 1 & 2 & -5 \\ 2 & 3 & 3 & 2 & 4 & 4 \\ 0 & 0 & 0 & -1 & -2 & 0 \\ 3 & 6 & 5 & 0 & 1 & 7 \end{pmatrix}$$

.324

$$J = \operatorname{diag}(J_4(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -25 & -1 & -27 & -31 & -32 & -32 \\ -9 & 0 & -9 & -10 & -11 & -11 \\ 4 & 0 & 4 & 5 & 4 & 5 \\ -8 & -1 & -10 & -12 & -10 & -11 \\ -35 & -1 & -38 & -44 & -43 & -45 \\ 8 & 0 & 8 & 9 & 10 & 10 \end{pmatrix}$$

.325

$$J = \operatorname{diag}(J_4(0), J_2(0))$$

$$P = \begin{pmatrix} 14 & 22 & 7 & 18 & 1 & 31 \\ -20 & -29 & -7 & -22 & -2 & -42 \\ -12 & -17 & -4 & -13 & -1 & -25 \\ 12 & 18 & 5 & 14 & 1 & 26 \\ 25 & 37 & 11 & 30 & 2 & 53 \\ -8 & -11 & -3 & -9 & -1 & -16 \end{pmatrix}$$

.326

$$J = \operatorname{diag}(J_5(0), J_1(0))$$

$$P = \begin{pmatrix} -7 & -8 & -3 & -9 & -6 & -10 \\ -30 & -34 & -15 & -39 & -27 & -42 \\ -55 & -60 & -29 & -69 & -50 & -73 \\ 38 & 43 & 19 & 49 & 34 & 53 \\ -20 & -22 & -10 & -25 & -18 & -27 \\ -25 & -28 & -12 & -32 & -22 & -35 \end{pmatrix}$$

.327

$$J = \operatorname{diag}(J_5(0), J_1(0))$$

$$P = \begin{pmatrix} 20 & 2 & 3 & 29 & 31 & 0 \\ -12 & -1 & -2 & -16 & -18 & 0 \\ 8 & 1 & 1 & 11 & 13 & -1 \\ 8 & 1 & 1 & 11 & 12 & 0 \\ 10 & 1 & 2 & 15 & 15 & 1 \\ 9 & 1 & 1 & 13 & 14 & 0 \end{pmatrix}$$

.328

$$J = \operatorname{diag}(J_6(0))$$

$$P = \begin{pmatrix} 1 & 0 & -4 & 0 & -1 & -5 \\ 2 & -3 & -16 & -3 & -4 & -19 \\ 2 & -1 & -11 & -1 & -3 & -13 \\ -4 & 7 & 30 & 6 & 7 & 37 \\ -5 & 7 & 33 & 6 & 8 & 41 \\ 0 & -3 & -8 & -3 & -2 & -10 \end{pmatrix}$$

.329

$$J = \operatorname{diag}(J_3(0), J_3(0))$$

$$P = \begin{pmatrix} 18 & 4 & 13 & 12 & 25 & 3 \\ 15 & 3 & 11 & 10 & 21 & 3 \\ 2 & 0 & 2 & 2 & 3 & 2 \\ -6 & -1 & -4 & -4 & -8 & -1 \\ -6 & -2 & -4 & -3 & -8 & 0 \\ -13 & -3 & -9 & -8 & -18 & -2 \end{pmatrix}$$

.330

$$J = \operatorname{diag}(J_3(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} 5 & 20 & 2 & 12 & 29 & 34 \\ -1 & -4 & 0 & -2 & -6 & -7 \\ -3 & -11 & -1 & -6 & -16 & -19 \\ 3 & 12 & 1 & 7 & 18 & 21 \\ -4 & -15 & -1 & -9 & -22 & -26 \\ 10 & 39 & 4 & 23 & 58 & 67 \end{pmatrix}$$

.331

$$J = \operatorname{diag}(J_5(0), J_1(0))$$

$$P = \begin{pmatrix} 7 & -1 & 18 & 32 & -11 & 27 \\ 2 & 0 & 5 & 9 & -3 & 8 \\ -3 & 0 & -8 & -14 & 4 & -12 \\ 1 & -1 & 3 & 6 & -4 & 4 \\ 0 & 0 & -1 & -1 & 0 & -1 \\ -8 & 1 & -20 & -36 & 13 & -30 \end{pmatrix}$$

.332

$$J = \operatorname{diag}(J_6(0))$$

$$P = \begin{pmatrix} 13 & 30 & 25 & 8 & 22 & 36 \\ 4 & 8 & 8 & 3 & 7 & 10 \\ 13 & 28 & 26 & 9 & 23 & 34 \\ -12 & -27 & -24 & -8 & -21 & -33 \\ -2 & -5 & -4 & -1 & -3 & -6 \\ 2 & 6 & 3 & 0 & 2 & 7 \end{pmatrix}$$

.333

$$J = \operatorname{diag}(J_2(0), J_2(0), J_2(0))$$

$$P = \begin{pmatrix} -33 & -16 & -5 & -17 & -7 & -68 \\ 19 & 9 & 3 & 9 & 4 & 39 \\ -31 & -15 & -5 & -16 & -7 & -63 \\ 31 & 15 & 5 & 16 & 7 & 62 \\ -12 & -6 & -2 & -6 & -3 & -24 \\ 18 & 9 & 3 & 10 & 4 & 36 \end{pmatrix}$$

.334

$$J = \operatorname{diag}(J_4(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 6 & 3 & 2 & 5 & 1 & 7 \\ -11 & -5 & -1 & -6 & 0 & -13 \\ 9 & 4 & 1 & 5 & 0 & 11 \\ 1 & 0 & -1 & -1 & -1 & 1 \\ -3 & -2 & -2 & -3 & 0 & -4 \\ 8 & 3 & 0 & 4 & 1 & 9 \end{pmatrix}$$

.335

$$J = \operatorname{diag}(J_4(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 3 & 5 & 3 & 6 & 6 & 3 \\ 3 & -1 & -15 & -11 & 3 & -17 \\ -3 & 0 & 10 & 7 & -3 & 12 \\ -3 & -2 & 7 & 3 & -5 & 8 \\ 1 & 2 & 2 & 3 & 2 & 2 \\ 3 & 2 & -4 & -1 & 4 & -5 \end{pmatrix}$$

.336

$$J = \operatorname{diag}(J_5(0), J_1(0))$$

$$P = \begin{pmatrix} -2 & -1 & -4 & -3 & -5 & -4 \\ -2 & -1 & -5 & -2 & -5 & -8 \\ -5 & -2 & -9 & -9 & -13 & -3 \\ -1 & 0 & 0 & 0 & 0 & -1 \\ 1 & 1 & 4 & 3 & 5 & 2 \\ -3 & -1 & -5 & -5 & -7 & -2 \end{pmatrix}$$

.337

$$J = \operatorname{diag}(J_4(0), J_2(0))$$

$$P = \begin{pmatrix} -2 & -16 & -9 & -19 & -2 & -20 \\ 2 & 12 & 6 & 12 & 1 & 14 \\ 1 & 11 & 6 & 12 & 1 & 13 \\ 0 & -7 & -5 & -10 & -1 & -9 \\ 2 & 10 & 4 & 8 & 0 & 11 \\ -1 & -10 & -5 & -9 & 0 & -11 \end{pmatrix}$$

.338

$$J = \operatorname{diag}(J_6(0))$$

$$P = \begin{pmatrix} 9 & 14 & 11 & 12 & 18 & 7 \\ -8 & -12 & -9 & -10 & -15 & -7 \\ 9 & 14 & 12 & 13 & 19 & 6 \\ 0 & -4 & -10 & -8 & -11 & 7 \\ -8 & -11 & -6 & -8 & -12 & -9 \\ 5 & 9 & 9 & 9 & 13 & 2 \end{pmatrix}$$

.339

$$J = \operatorname{diag}(J_6(0))$$

$$P = \begin{pmatrix} 11 & 5 & 5 & 4 & 2 & 14 \\ -22 & -11 & -10 & -9 & -5 & -29 \\ -2 & -1 & -1 & 0 & 0 & -3 \\ 14 & 7 & 6 & 6 & 3 & 18 \\ 19 & 9 & 8 & 8 & 4 & 23 \\ 25 & 12 & 11 & 10 & 5 & 31 \end{pmatrix}$$

.340

$$J = \operatorname{diag}(J_3(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} -1 & -2 & -2 & -2 & -1 & -2 \\ 20 & 57 & 42 & 57 & 32 & 61 \\ 19 & 57 & 41 & 56 & 32 & 61 \\ 11 & 31 & 23 & 31 & 17 & 33 \\ -23 & -68 & -49 & -67 & -38 & -73 \\ 5 & 14 & 10 & 14 & 8 & 15 \end{pmatrix}$$

.341

$$J = \operatorname{diag}(J_3(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} -30 & -30 & -5 & -8 & -11 & -56 \\ -8 & -8 & -1 & -2 & -3 & -15 \\ -11 & -11 & -2 & -3 & -4 & -21 \\ 5 & 4 & 0 & 1 & 0 & 10 \\ 4 & 5 & 1 & 1 & 3 & 7 \\ -32 & -33 & -6 & -9 & -13 & -60 \end{pmatrix}$$

.342

$$J = \operatorname{diag}(J_6(0))$$

$$P = \begin{pmatrix} 3 & 4 & 5 & 5 & 6 & 1 \\ -1 & -4 & -3 & -4 & -4 & -1 \\ 8 & 12 & 12 & 15 & 15 & 7 \\ 4 & 7 & 7 & 8 & 9 & 2 \\ 3 & 5 & 5 & 6 & 6 & 2 \\ -5 & -8 & -8 & -10 & -10 & -4 \end{pmatrix}$$

.343

$$J = \operatorname{diag}(J_4(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 23 & 4 & 3 & 5 & 23 & 36 \\ -8 & -1 & -1 & -1 & -8 & -13 \\ -26 & -4 & -4 & -4 & -27 & -43 \\ 7 & 2 & 0 & 3 & 6 & 9 \\ 18 & 3 & 2 & 4 & 18 & 28 \\ 1 & 1 & -1 & 2 & 0 & -1 \end{pmatrix}$$

.344

$$J = \operatorname{diag}(J_6(0))$$

$$P = \begin{pmatrix} 2 & 4 & 3 & -2 & 3 & 7 \\ 6 & 10 & 9 & -6 & 9 & 20 \\ -9 & -16 & -14 & 9 & -14 & -31 \\ -16 & -28 & -24 & 17 & -25 & -55 \\ 7 & 13 & 11 & -8 & 11 & 25 \\ -12 & -21 & -18 & 13 & -19 & -42 \end{pmatrix}$$

.345

$$J = \operatorname{diag}(J_4(0), J_2(0))$$

$$P = \begin{pmatrix} 6 & 10 & 0 & 9 & 6 & 12 \\ -6 & -10 & 0 & -9 & -7 & -12 \\ -3 & -4 & 0 & -4 & -3 & -5 \\ 7 & 11 & 1 & 10 & 7 & 13 \\ 4 & 6 & 0 & 5 & 6 & 7 \\ 7 & 10 & 1 & 9 & 8 & 12 \end{pmatrix}$$

.346

$$J = \operatorname{diag}(J_4(0), J_2(0))$$

$$P = \begin{pmatrix} 70 & 92 & 36 & 75 & 93 & 101 \\ 2 & 3 & 1 & 2 & 2 & 4 \\ -59 & -78 & -30 & -63 & -78 & -86 \\ -39 & -51 & -20 & -42 & -52 & -56 \\ -52 & -69 & -27 & -56 & -69 & -76 \\ 43 & 57 & 22 & 46 & 57 & 63 \end{pmatrix}$$

.347

$$J = \operatorname{diag}(J_4(0), J_2(0))$$

$$P = \begin{pmatrix} 25 & 16 & 11 & 29 & 12 & 20 \\ -19 & -12 & -8 & -22 & -8 & -16 \\ 32 & 21 & 14 & 37 & 14 & 27 \\ -21 & -14 & -9 & -24 & -8 & -19 \\ -25 & -16 & -11 & -29 & -11 & -21 \\ 18 & 13 & 8 & 21 & 7 & 17 \end{pmatrix}$$

.348

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -2 & -12 & -32 & -2 & -1 & -33 \\ -4 & -27 & -67 & -2 & -4 & -70 \\ -4 & -29 & -74 & -3 & -4 & -77 \\ 7 & 48 & 121 & 4 & 7 & 126 \\ 0 & -1 & -3 & 0 & 0 & -3 \\ -5 & -33 & -85 & -4 & -4 & -88 \end{pmatrix}$$

.349

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 7 & 6 & 7 & 8 & 0 & 10 \\ 17 & 15 & 17 & 20 & 1 & 25 \\ -22 & -19 & -22 & -26 & -1 & -32 \\ 12 & 10 & 13 & 15 & 0 & 17 \\ -8 & -7 & -9 & -10 & 0 & -12 \\ -22 & -19 & -25 & -29 & 0 & -32 \end{pmatrix}$$

.350

$$J = \operatorname{diag}(J_3(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} 4 & 0 & 1 & 2 & 4 & -2 \\ -1 & -1 & -2 & 1 & -3 & -3 \\ 3 & 1 & 2 & 1 & 4 & 1 \\ 2 & -2 & -1 & 1 & 1 & -4 \\ 0 & -1 & -1 & 0 & -1 & -2 \\ -2 & -1 & -2 & 1 & -4 & -3 \end{pmatrix}$$

.351

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 10 & 6 & 5 & 1 & 12 & 6 \\ -22 & -15 & -13 & -2 & -27 & -11 \\ 0 & -1 & -1 & 0 & 0 & 2 \\ 7 & 9 & 8 & 0 & 9 & -3 \\ 8 & 3 & 2 & 1 & 10 & 9 \\ -17 & -9 & -7 & -2 & -21 & -14 \end{pmatrix}$$

.352

$$J = \operatorname{diag}(J_6(0))$$

$$P = \begin{pmatrix} 0 & -2 & -1 & -3 & -3 & 0 \\ 1 & 3 & 1 & 5 & 5 & 0 \\ 6 & 9 & 2 & 14 & 15 & -1 \\ 10 & 19 & 6 & 29 & 30 & 0 \\ -7 & -13 & -4 & -20 & -21 & 0 \\ -8 & -13 & -4 & -20 & -21 & 0 \end{pmatrix}$$

.353

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -3 & 0 & -11 & -29 & -27 & -38 \\ -5 & -1 & -22 & -57 & -52 & -74 \\ -2 & 0 & -7 & -19 & -18 & -25 \\ -1 & -1 & -4 & -10 & -9 & -12 \\ 4 & 0 & 19 & 49 & 45 & 65 \\ -1 & 0 & -5 & -13 & -12 & -17 \end{pmatrix}$$

.354

$$J = \operatorname{diag}(J_4(0), J_2(0))$$

$$P = \begin{pmatrix} 13 & 9 & 27 & 45 & -4 & 59 \\ 4 & 3 & 9 & 15 & -3 & 21 \\ 0 & 0 & 0 & 0 & 1 & -1 \\ -17 & -12 & -35 & -59 & 4 & -76 \\ 5 & 4 & 10 & 17 & 1 & 20 \\ -3 & -2 & -6 & -10 & 1 & -13 \end{pmatrix}$$

.355

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 2 & -18 & -10 & 3 & 3 & -16 \\ -2 & 14 & 8 & -3 & -2 & 13 \\ 3 & -28 & -16 & 5 & 4 & -26 \\ -1 & 7 & 4 & -1 & -1 & 6 \\ -1 & -5 & -3 & 0 & 0 & -5 \\ 0 & 2 & 1 & 0 & 0 & 2 \end{pmatrix}$$

.356

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 12 & 12 & 7 & 10 & 28 & 32 \\ 13 & 13 & 7 & 11 & 30 & 35 \\ 5 & 5 & 3 & 4 & 12 & 13 \\ -21 & -20 & -12 & -17 & -48 & -55 \\ 11 & 11 & 6 & 9 & 25 & 29 \\ -25 & -25 & -14 & -21 & -58 & -66 \end{pmatrix}$$

.357

$$J = \operatorname{diag}(J_4(0), J_2(0))$$

$$P = \begin{pmatrix} -3 & 1 & 0 & -2 & -1 & -5 \\ -8 & -1 & -2 & -9 & -9 & -11 \\ -6 & 0 & -1 & -6 & -6 & -9 \\ 4 & 1 & 2 & 6 & 6 & 5 \\ 5 & 1 & 1 & 5 & 6 & 7 \\ 10 & 2 & 3 & 12 & 13 & 14 \end{pmatrix}$$

.358

$$J = \operatorname{diag}(J_4(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 20 & 10 & 2 & 31 & 73 & 150 \\ -17 & -9 & -2 & -28 & -64 & -132 \\ -10 & -6 & -1 & -18 & -40 & -83 \\ -1 & 0 & 0 & 0 & -2 & -3 \\ -18 & -10 & -2 & -31 & -70 & -145 \\ -10 & -5 & -1 & -16 & -37 & -76 \end{pmatrix}$$

.359

$$J = \operatorname{diag}(J_5(0), J_1(0))$$

$$P = \begin{pmatrix} -44 & -22 & -23 & -7 & -13 & -51 \\ -13 & -7 & -7 & -2 & -4 & -15 \\ -11 & -6 & -6 & -2 & -3 & -13 \\ -49 & -25 & -26 & -8 & -15 & -56 \\ -18 & -9 & -9 & -3 & -5 & -21 \\ -19 & -9 & -10 & -3 & -6 & -22 \end{pmatrix}$$

.360

$$J = \operatorname{diag}(J_5(0), J_1(0))$$

$$P = \begin{pmatrix} 3 & 5 & 7 & 2 & 4 & 7 \\ -8 & -21 & -21 & -11 & -12 & -29 \\ 12 & 31 & 31 & 16 & 18 & 42 \\ 2 & 4 & 5 & 2 & 3 & 6 \\ 0 & -1 & 0 & -1 & 0 & -1 \\ -4 & -11 & -10 & -6 & -6 & -15 \end{pmatrix}$$

.361

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 2 & -2 & 8 & 0 & -3 & 11 \\ -1 & 1 & -4 & 0 & 2 & -6 \\ 0 & 0 & 1 & 0 & 0 & 1 \\ 2 & 0 & 7 & 1 & 0 & 8 \\ 5 & 1 & 18 & 3 & 2 & 18 \\ -11 & 0 & -39 & -5 & 0 & -43 \end{pmatrix}$$

.362

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -13 & -3 & -12 & -8 & -3 & -15 \\ -12 & -2 & -11 & -7 & -3 & -13 \\ -7 & -3 & -6 & -4 & 0 & -10 \\ -8 & -3 & -7 & -5 & -1 & -11 \\ 3 & 0 & 3 & 1 & 0 & 3 \\ -18 & -6 & -16 & -11 & -3 & -23 \end{pmatrix}$$

.363

$$J = \operatorname{diag}(J_5(0), J_1(0))$$

$$P = \begin{pmatrix} -24 & -37 & -38 & -3 & -34 & -44 \\ 18 & 30 & 31 & 2 & 26 & 35 \\ -22 & -35 & -36 & -3 & -31 & -41 \\ -15 & -24 & -25 & -2 & -21 & -28 \\ -40 & -64 & -66 & -5 & -57 & -75 \\ -36 & -57 & -59 & -5 & -51 & -67 \end{pmatrix}$$

.364

$$J = \operatorname{diag}(J_5(0), J_1(0))$$

$$P = \begin{pmatrix} -12 & -8 & -23 & -19 & -2 & -26 \\ -8 & -9 & -11 & -14 & -1 & -11 \\ 0 & -2 & 2 & -1 & 0 & 3 \\ 6 & 5 & 11 & 10 & 1 & 12 \\ -14 & -11 & -25 & -23 & -2 & -28 \\ -11 & -6 & -23 & -17 & -2 & -27 \end{pmatrix}$$

.365

$$J = \operatorname{diag}(J_4(0), J_2(0))$$

$$P = \begin{pmatrix} 4 & 2 & 3 & 7 & 2 & 8 \\ 4 & 0 & 0 & 8 & -1 & 10 \\ 13 & 2 & 3 & 25 & 0 & 31 \\ -8 & -3 & -4 & -15 & -2 & -18 \\ -1 & -1 & -1 & -2 & -1 & -2 \\ -3 & 1 & 2 & -6 & 2 & -8 \end{pmatrix}$$

.366

$$J = \operatorname{diag}(J_3(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} 43 & 28 & 32 & 26 & 46 & 78 \\ 66 & 42 & 48 & 40 & 71 & 120 \\ 63 & 40 & 46 & 38 & 68 & 115 \\ -13 & -8 & -9 & -8 & -14 & -24 \\ -21 & -13 & -15 & -13 & -23 & -39 \\ 23 & 15 & 17 & 14 & 25 & 42 \end{pmatrix}$$

.367

$$J = \operatorname{diag}(J_4(0), J_2(0))$$

$$P = \begin{pmatrix} -2 & -1 & -1 & 0 & -2 & -1 \\ 12 & 7 & 8 & 2 & 15 & 12 \\ 21 & 12 & 15 & 4 & 27 & 21 \\ 1 & 0 & 0 & 0 & 1 & 0 \\ -1 & -1 & -2 & -1 & -2 & -3 \\ 19 & 11 & 14 & 4 & 25 & 21 \end{pmatrix}$$

.368

$$J = \operatorname{diag}(J_4(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 26 & 27 & 56 & 62 & 76 & 6 \\ 4 & 4 & 9 & 10 & 12 & 1 \\ -17 & -18 & -37 & -40 & -49 & -4 \\ 0 & 0 & 1 & 1 & 1 & 0 \\ 6 & 6 & 13 & 15 & 18 & 1 \\ 0 & 0 & 0 & 1 & 1 & 0 \end{pmatrix}$$

.369

$$J = \operatorname{diag}(J_2(0), J_2(0), J_2(0))$$

$$P = \begin{pmatrix} 1 & 0 & -2 & -2 & -1 & -4 \\ 0 & 0 & 1 & 2 & 0 & 2 \\ 7 & 2 & 5 & 8 & 6 & 4 \\ -1 & 0 & -1 & -2 & 0 & -1 \\ 1 & 0 & -1 & -1 & 0 & -2 \\ 4 & 1 & 3 & 6 & 2 & 3 \end{pmatrix}$$

.370

$$J = \operatorname{diag}(J_4(0), J_2(0))$$

$$P = \begin{pmatrix} 2 & 2 & 1 & 1 & 1 & 1 \\ 4 & 0 & -5 & -2 & -2 & -8 \\ 1 & -2 & -5 & -3 & -3 & -8 \\ -1 & 1 & 3 & 2 & 2 & 5 \\ -7 & -1 & 8 & 4 & 5 & 14 \\ -3 & 2 & 9 & 6 & 7 & 15 \end{pmatrix}$$

.371

$$J = \operatorname{diag}(J_7(0))$$

$$P = \begin{pmatrix} 25 & 23 & 3 & 34 & 10 & 14 & 35 \\ -34 & -32 & -5 & -46 & -15 & -20 & -48 \\ 18 & 17 & 2 & 25 & 7 & 10 & 26 \\ -20 & -18 & -4 & -26 & -9 & -13 & -27 \\ 65 & 61 & 9 & 88 & 28 & 38 & 92 \\ -36 & -34 & -6 & -48 & -17 & -22 & -51 \\ -2 & -2 & 0 & -3 & -1 & -1 & -3 \end{pmatrix}$$

.372

$$J = \operatorname{diag}(J_6(0), J_1(0))$$

$$P = \begin{pmatrix} 4 & -4 & -18 & -34 & -19 & 2 & -58 \\ 0 & -3 & -9 & -14 & -8 & -1 & -23 \\ 3 & -4 & -16 & -29 & -16 & 1 & -49 \\ 3 & -2 & -10 & -22 & -12 & 2 & -36 \\ -1 & 0 & 0 & 4 & 2 & -1 & 5 \\ -5 & 6 & 25 & 47 & 26 & -2 & 79 \\ -2 & 3 & 11 & 22 & 12 & -1 & 36 \end{pmatrix}$$

.373

$$J = \operatorname{diag}(J_4(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} 6 & 7 & 1 & 2 & 2 & 5 & 7 \\ 16 & 19 & 3 & 5 & 5 & 13 & 20 \\ 11 & 14 & -1 & 0 & 5 & 6 & 14 \\ -17 & -20 & -2 & -4 & -6 & -13 & -20 \\ 15 & 17 & 5 & 7 & 4 & 14 & 19 \\ 8 & 9 & 1 & 2 & 3 & 6 & 9 \\ -29 & -36 & 3 & 0 & -13 & -16 & -35 \end{pmatrix}$$

.374

$$J = \operatorname{diag}(J_2(0), J_2(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} -2 & 4 & 7 & 21 & -1 & -10 & 25 \\ 5 & 5 & 8 & -1 & 4 & 13 & -4 \\ 10 & 10 & 17 & 1 & 8 & 25 & -5 \\ -15 & -17 & -29 & -8 & -12 & -36 & 0 \\ 5 & 3 & 5 & -8 & 4 & 15 & -12 \\ 9 & 7 & 12 & -6 & 7 & 24 & -12 \\ -10 & -11 & -19 & -6 & -8 & -23 & -1 \end{pmatrix}$$

.375

$$J = \operatorname{diag}(J_6(0), J_1(0))$$

$$P = \begin{pmatrix} -9 & -1 & -8 & -13 & -5 & -15 & -22 \\ 3 & -2 & 7 & 7 & 1 & 10 & 27 \\ -15 & 0 & -16 & -23 & -8 & -28 & -49 \\ -25 & -4 & -20 & -34 & -14 & -39 & -53 \\ 29 & 4 & 24 & 40 & 16 & 46 & 65 \\ -23 & -4 & -18 & -31 & -13 & -35 & -46 \\ -6 & -3 & -1 & -6 & -4 & -5 & 4 \end{pmatrix}$$

.376

$$J = \operatorname{diag}(J_4(0), J_3(0))$$

$$P = \begin{pmatrix} 1 & 11 & 10 & 49 & 56 & 47 & 56 \\ 0 & -1 & 0 & -1 & -2 & -1 & -1 \\ 1 & 9 & 8 & 42 & 48 & 40 & 48 \\ 1 & 12 & 9 & 48 & 57 & 45 & 54 \\ 0 & 0 & 0 & 1 & 1 & 1 & 1 \\ -1 & -10 & -9 & -43 & -50 & -41 & -49 \\ 1 & 8 & 7 & 36 & 41 & 34 & 41 \end{pmatrix}$$

.377

$$J = \operatorname{diag}(J_4(0), J_3(0))$$

$$P = \begin{pmatrix} 0 & -7 & -8 & -5 & -8 & -29 & 0 \\ -2 & -21 & -25 & -14 & -26 & -84 & -1 \\ 0 & 3 & 3 & 2 & 3 & 12 & 0 \\ -1 & -16 & -19 & -11 & -20 & -66 & 0 \\ 0 & 1 & 1 & 1 & 1 & 4 & -1 \\ -1 & -15 & -18 & -10 & -19 & -61 & -1 \\ 0 & 7 & 8 & 5 & 8 & 29 & -1 \end{pmatrix}$$

.378

$$J = \operatorname{diag}(J_3(0), J_2(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -34 & -57 & -67 & -37 & -38 & -31 & -100 \\ 26 & 47 & 55 & 30 & 32 & 23 & 81 \\ -41 & -69 & -81 & -45 & -46 & -37 & -121 \\ -19 & -34 & -40 & -22 & -23 & -17 & -59 \\ -6 & -13 & -15 & -8 & -9 & -5 & -22 \\ 47 & 82 & 96 & 53 & 55 & 42 & 142 \\ -51 & -88 & -103 & -57 & -59 & -46 & -153 \end{pmatrix}$$

.379

$$J = \operatorname{diag}(J_3(0), J_3(0), J_1(0))$$

$$P = \begin{pmatrix} 9 & 4 & 6 & 1 & 8 & 7 & 11 \\ -15 & -4 & -5 & 0 & -11 & -4 & -18 \\ 5 & 1 & 0 & -1 & 3 & -1 & 6 \\ -5 & -2 & -3 & -1 & -3 & -3 & -6 \\ -9 & -3 & -5 & -1 & -7 & -5 & -11 \\ 6 & 2 & 3 & 0 & 5 & 3 & 7 \\ -4 & -1 & -1 & 0 & -3 & -1 & -5 \end{pmatrix}$$

.380

$$J = \operatorname{diag}(J_5(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -11 & -1 & -6 & -3 & -16 & -7 & -16 \\ -36 & 0 & -20 & -6 & -51 & -20 & -52 \\ 65 & -3 & 36 & 8 & 93 & 34 & 95 \\ -70 & 2 & -39 & -10 & -100 & -38 & -102 \\ 59 & -2 & 33 & 8 & 84 & 31 & 86 \\ -30 & 2 & -17 & -3 & -43 & -15 & -44 \\ 70 & -3 & 39 & 9 & 100 & 37 & 102 \end{pmatrix}$$

.381

$$J = \operatorname{diag}(J_4(0), J_3(0))$$

$$P = \begin{pmatrix} 98 & 72 & 35 & 173 & 86 & 22 & 202 \\ -114 & -83 & -40 & -201 & -100 & -25 & -235 \\ -104 & -76 & -37 & -183 & -91 & -23 & -214 \\ -17 & -13 & -7 & -29 & -15 & -4 & -34 \\ 64 & 47 & 23 & 112 & 56 & 14 & 131 \\ 75 & 55 & 27 & 132 & 66 & 17 & 154 \\ -63 & -46 & -22 & -111 & -55 & -14 & -130 \end{pmatrix}$$

.382

$$J = \operatorname{diag}(J_4(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} 65 & 13 & 41 & 6 & 14 & 49 & 92 \\ -12 & -3 & -8 & -1 & -3 & -9 & -17 \\ -48 & -9 & -30 & -4 & -10 & -36 & -68 \\ 29 & 6 & 18 & 3 & 6 & 22 & 41 \\ 33 & 7 & 21 & 3 & 7 & 25 & 47 \\ -97 & -19 & -61 & -10 & -21 & -72 & -136 \\ 51 & 10 & 32 & 5 & 11 & 38 & 72 \end{pmatrix}$$

.383

$$J = \operatorname{diag}(J_7(0))$$

$$P = \begin{pmatrix} 2 & 4 & -2 & 8 & 7 & -9 & 10 \\ -7 & -7 & -10 & -15 & -12 & -2 & -17 \\ 5 & 3 & 11 & 7 & 5 & 10 & 7 \\ -2 & 0 & -7 & -1 & 0 & -9 & 0 \\ -1 & -2 & 1 & -5 & -4 & 5 & -6 \\ 15 & 15 & 21 & 34 & 26 & 3 & 38 \\ 0 & -1 & 3 & -2 & -2 & 6 & -3 \end{pmatrix}$$

.384

$$J = \operatorname{diag}(J_4(0), J_3(0))$$

$$P = \begin{pmatrix} 1 & 0 & 2 & -1 & 0 & 2 & -4 \\ 0 & 2 & 1 & 4 & 5 & 4 & 6 \\ -3 & 8 & -4 & 21 & 17 & 7 & 34 \\ -1 & 0 & -3 & 1 & -2 & -4 & 3 \\ 1 & -3 & 1 & -8 & -8 & -4 & -14 \\ 1 & -6 & 0 & -14 & -13 & -8 & -20 \\ -2 & 5 & -3 & 14 & 11 & 4 & 23 \end{pmatrix}$$

.385

$$J = \operatorname{diag}(J_7(0))$$

$$P = \begin{pmatrix} -1 & 1 & -2 & -1 & -1 & -2 & 3 \\ -1 & 2 & 0 & -1 & 0 & 0 & 4 \\ -6 & -14 & -18 & -5 & -15 & -26 & -8 \\ 2 & 0 & 3 & 2 & 2 & 4 & -3 \\ 0 & -3 & -2 & 0 & -2 & -3 & -4 \\ 3 & 1 & 7 & 3 & 5 & 9 & -5 \\ -6 & -15 & -18 & -5 & -15 & -26 & -10 \end{pmatrix}$$

.386

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 80 & 178 & 39 & 43 & 60 & 69 & 267 \\ -35 & -78 & -17 & -19 & -26 & -30 & -117 \\ 19 & 42 & 9 & 10 & 14 & 16 & 63 \\ -4 & -9 & -2 & -2 & -3 & -3 & -13 \\ 4 & 9 & 2 & 2 & 3 & 3 & 14 \\ 6 & 14 & 3 & 3 & 5 & 5 & 21 \\ 45 & 100 & 22 & 24 & 34 & 38 & 150 \end{pmatrix}$$

.387

$$J = \operatorname{diag}(J_4(0), J_3(0))$$

$$P = \begin{pmatrix} 6 & 5 & 19 & 9 & 11 & 29 & 37 \\ 10 & 8 & 31 & 13 & 16 & 49 & 63 \\ 12 & 13 & 43 & 20 & 25 & 64 & 81 \\ -3 & -3 & -10 & -5 & -6 & -15 & -19 \\ 7 & 8 & 26 & 12 & 15 & 38 & 48 \\ 4 & 2 & 10 & 4 & 5 & 17 & 22 \\ -5 & -5 & -17 & -8 & -10 & -25 & -32 \end{pmatrix}$$

.388

$$J = \operatorname{diag}(J_7(0))$$

$$P = \begin{pmatrix} 4 & 2 & 0 & 1 & 6 & 7 & 1 \\ -2 & 1 & -4 & -10 & 8 & -5 & -21 \\ -17 & -6 & -6 & -16 & -10 & -30 & -30 \\ -3 & 1 & -5 & -13 & 10 & -7 & -27 \\ 6 & 1 & 4 & 10 & -2 & 11 & 20 \\ 27 & 10 & 8 & 22 & 20 & 47 & 40 \\ 0 & 2 & -4 & -10 & 11 & -2 & -21 \end{pmatrix}$$

.389

$$J = \operatorname{diag}(J_2(0), J_2(0), J_1(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 0 & -1 & 0 & 0 & 0 & -2 & 0 \\ -11 & -13 & -15 & -35 & -18 & -5 & -49 \\ -7 & -9 & -9 & -21 & -11 & -4 & -30 \\ 10 & 12 & 13 & 31 & 16 & 4 & 44 \\ -12 & -14 & -15 & -36 & -19 & -5 & -51 \\ -7 & -8 & -10 & -23 & -12 & -3 & -32 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}$$

.390

$$J = \operatorname{diag}(J_6(0), J_1(0))$$

$$P = \begin{pmatrix} 4 & 1 & 6 & -17 & 21 & -19 & -13 \\ 4 & 1 & 6 & -15 & 20 & -17 & -11 \\ -13 & -4 & -21 & 53 & -68 & 59 & 38 \\ -10 & -3 & -16 & 40 & -52 & 45 & 29 \\ 0 & 0 & 0 & -1 & 1 & -1 & -1 \\ -3 & -1 & -5 & 9 & -15 & 11 & 5 \\ -3 & -1 & -4 & 13 & -14 & 14 & 11 \end{pmatrix}$$

.391

$$J = \operatorname{diag}(J_4(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} 8 & 7 & 2 & 12 & 18 & 4 & 19 \\ -6 & -4 & -3 & -5 & -11 & 3 & -13 \\ -12 & -10 & -4 & -14 & -26 & -1 & -29 \\ 8 & 6 & 3 & 9 & 16 & 0 & 18 \\ -1 & -1 & 0 & -2 & -2 & -1 & -2 \\ 15 & 12 & 6 & 17 & 31 & -1 & 35 \\ -17 & -14 & -6 & -20 & -36 & -1 & -40 \end{pmatrix}$$

.392

$$J = \operatorname{diag}(J_3(0), J_2(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 60 & 79 & 331 & 70 & 264 & 174 & 342 \\ -10 & -12 & -53 & -11 & -41 & -28 & -55 \\ 45 & 61 & 253 & 54 & 203 & 133 & 261 \\ -27 & -36 & -150 & -32 & -120 & -79 & -155 \\ -31 & -39 & -167 & -35 & -132 & -88 & -173 \\ 43 & 56 & 236 & 50 & 188 & 124 & 244 \\ -48 & -64 & -268 & -57 & -214 & -141 & -277 \end{pmatrix}$$

.393

$$J = \operatorname{diag}(J_5(0), J_2(0))$$

$$P = \begin{pmatrix} -20 & -13 & -35 & -37 & -11 & -7 & -65 \\ 15 & 10 & 26 & 28 & 9 & 5 & 48 \\ 26 & 19 & 44 & 50 & 18 & 9 & 81 \\ -6 & -5 & -10 & -12 & -5 & -2 & -18 \\ 12 & 9 & 20 & 23 & 9 & 4 & 36 \\ -13 & -8 & -22 & -23 & -7 & -4 & -40 \\ 45 & 28 & 78 & 82 & 24 & 15 & 144 \end{pmatrix}$$

.394

$$J = \operatorname{diag}(J_6(0), J_1(0))$$

$$P = \begin{pmatrix} -21 & -56 & -40 & -58 & -64 & -50 & -58 \\ -9 & -23 & -16 & -25 & -27 & -20 & -25 \\ -12 & -23 & -12 & -34 & -32 & -13 & -36 \\ 10 & 18 & 9 & 28 & 26 & 9 & 30 \\ 1 & 7 & 7 & 2 & 5 & 10 & 1 \\ 16 & 43 & 31 & 44 & 49 & 39 & 44 \\ 3 & 3 & 0 & 8 & 6 & -1 & 9 \end{pmatrix}$$

.395

$$J = \operatorname{diag}(J_5(0), J_2(0))$$

$$P = \begin{pmatrix} 5 & 16 & 25 & 19 & 6 & 8 & 18 \\ 5 & 28 & 46 & 33 & 5 & 11 & 25 \\ 2 & -6 & -12 & -7 & 3 & 0 & -1 \\ 1 & -4 & -8 & -5 & 2 & 0 & -1 \\ 3 & 14 & 23 & 17 & 3 & 6 & 13 \\ -4 & -19 & -31 & -23 & -4 & -8 & -18 \\ -2 & -9 & -15 & -11 & -2 & -4 & -9 \end{pmatrix}$$

.396

$$J = \operatorname{diag}(J_4(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} 0 & -2 & -2 & -3 & 0 & -3 & -3 \\ -2 & 9 & 9 & 14 & -1 & 13 & 17 \\ -4 & 12 & 11 & 19 & -3 & 17 & 22 \\ -4 & 17 & 16 & 27 & -3 & 24 & 30 \\ -2 & 12 & 11 & 19 & -2 & 17 & 20 \\ -1 & -4 & -5 & -6 & -1 & -6 & -7 \\ -3 & 9 & 7 & 14 & -3 & 12 & 14 \end{pmatrix}$$

.397

$$J = \operatorname{diag}(J_6(0), J_1(0))$$

$$P = \begin{pmatrix} 21 & 30 & 4 & 5 & 94 & 33 & 108 \\ -5 & -8 & -1 & -1 & -27 & -4 & -32 \\ -5 & -7 & -1 & -1 & -22 & -9 & -25 \\ 0 & -1 & 0 & 0 & -3 & 2 & -4 \\ 17 & 25 & 3 & 4 & 80 & 23 & 93 \\ -5 & -7 & -1 & -1 & -22 & -8 & -25 \\ -12 & -17 & -2 & -3 & -54 & -19 & -62 \end{pmatrix}$$

.398

$$J = \operatorname{diag}(J_5(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 23 & 24 & 17 & 11 & 16 & 35 & 61 \\ -2 & -2 & -2 & -1 & -2 & -3 & -5 \\ 2 & 2 & 1 & 1 & 1 & 3 & 5 \\ 24 & 24 & 18 & 12 & 17 & 36 & 62 \\ -38 & -39 & -28 & -19 & -26 & -58 & -100 \\ 28 & 30 & 20 & 14 & 18 & 43 & 75 \\ -1 & -3 & 0 & 0 & 1 & -2 & -5 \end{pmatrix}$$

.399

$$J = \operatorname{diag}(J_7(0))$$

$$P = \begin{pmatrix} -1 & -7 & -11 & -9 & -15 & -4 & -19 \\ 1 & 7 & 9 & 10 & 13 & 5 & 14 \\ 0 & 0 & 1 & 0 & 1 & 0 & 2 \\ 1 & 6 & 7 & 8 & 10 & 4 & 10 \\ 2 & 12 & 18 & 15 & 25 & 7 & 32 \\ -1 & -6 & -9 & -8 & -12 & -4 & -15 \\ -1 & -9 & -14 & -13 & -19 & -7 & -24 \end{pmatrix}$$

.400

$$J = \operatorname{diag}(J_4(0), J_1(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 2 & 1 & 10 & 11 & 21 & -13 & 18 \\ 0 & 1 & -9 & -9 & -18 & 13 & -15 \\ -7 & -6 & -18 & -22 & -33 & 16 & -30 \\ 2 & 2 & 1 & 2 & -1 & 3 & 0 \\ 7 & 7 & 6 & 10 & 8 & 2 & 9 \\ 0 & -1 & 9 & 9 & 19 & -14 & 16 \\ -2 & -2 & -2 & -3 & -4 & 1 & -4 \end{pmatrix}$$

.401

$$J = \operatorname{diag}(J_6(0), J_1(0))$$

$$P = \begin{pmatrix} 11 & 11 & 5 & 4 & 1 & 9 & 12 \\ -6 & -5 & -5 & -4 & 0 & 2 & -11 \\ 16 & 17 & 6 & 5 & 2 & 18 & 15 \\ -14 & -13 & -8 & -6 & -1 & -7 & -18 \\ 18 & 17 & 11 & 8 & 1 & 8 & 24 \\ -10 & -10 & -5 & -4 & -1 & -7 & -12 \\ -14 & -15 & -4 & -4 & -2 & -18 & -12 \end{pmatrix}$$

.402

$$J = \operatorname{diag}(J_6(0), J_1(0))$$

$$P = \begin{pmatrix} 1 & 1 & 1 & 2 & 2 & 1 & 2 \\ 1 & 5 & 15 & 19 & 17 & 7 & 30 \\ -4 & -6 & -12 & -17 & -17 & -7 & -24 \\ 0 & -3 & -12 & -15 & -12 & -6 & -23 \\ 3 & 2 & 1 & 3 & 4 & 2 & 2 \\ 1 & 5 & 17 & 22 & 19 & 8 & 34 \\ 1 & 2 & 4 & 6 & 6 & 2 & 9 \end{pmatrix}$$

.403

$$J = \operatorname{diag}(J_3(0), J_2(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -6 & 0 & -13 & -10 & -12 & -12 & -14 \\ 11 & -8 & 19 & 12 & 22 & 15 & 32 \\ -5 & 5 & -8 & -5 & -10 & -6 & -16 \\ -17 & 6 & -34 & -25 & -35 & -30 & -46 \\ -3 & -1 & -7 & -6 & -6 & -7 & -6 \\ -17 & 8 & -33 & -23 & -35 & -28 & -47 \\ -13 & 7 & -24 & -16 & -26 & -20 & -36 \end{pmatrix}$$

.404

$$J = \operatorname{diag}(J_6(0), J_1(0))$$

$$P = \begin{pmatrix} -20 & -8 & -37 & -27 & -18 & -25 & -55 \\ 2 & 1 & 4 & 3 & 2 & 2 & 7 \\ 14 & 6 & 28 & 21 & 15 & 16 & 46 \\ 16 & 7 & 32 & 24 & 17 & 19 & 52 \\ -17 & -8 & -37 & -28 & -21 & -18 & -66 \\ 9 & 4 & 19 & 14 & 10 & 10 & 32 \\ -7 & -3 & -14 & -10 & -7 & -8 & -22 \end{pmatrix}$$

.405

$$J = \operatorname{diag}(J_5(0), J_2(0))$$

$$P = \begin{pmatrix} 1 & 6 & 3 & 6 & 6 & 1 & 6 \\ -1 & -12 & -7 & -15 & -14 & -1 & -15 \\ -1 & -10 & -6 & -11 & -12 & -2 & -12 \\ 1 & 5 & 3 & 6 & 5 & 1 & 5 \\ 1 & -2 & -1 & -3 & -3 & 1 & -4 \\ 2 & 21 & 12 & 24 & 24 & 3 & 25 \\ -1 & 7 & 4 & 9 & 9 & -1 & 11 \end{pmatrix}$$

.406

$$J = \operatorname{diag}(J_5(0), J_2(0))$$

$$P = \begin{pmatrix} 3 & -24 & -6 & 2 & 11 & 9 & -17 \\ -2 & 12 & 3 & -2 & -8 & -7 & 7 \\ 1 & -5 & -2 & 2 & 5 & 4 & -1 \\ 0 & -3 & -2 & 1 & 3 & 2 & 0 \\ -1 & 11 & 3 & 0 & -3 & -2 & 9 \\ 1 & -4 & -1 & 1 & 3 & 3 & -2 \\ 2 & -14 & -5 & 3 & 10 & 8 & -6 \end{pmatrix}$$

.407

$$J = \operatorname{diag}(J_3(0), J_3(0), J_1(0))$$

$$P = \begin{pmatrix} -8 & -14 & -8 & -10 & -7 & -15 & -12 \\ 4 & 5 & 1 & 3 & 2 & -3 & 11 \\ -5 & -10 & -6 & -7 & -5 & -12 & -7 \\ 2 & 3 & 1 & 2 & 1 & 0 & 5 \\ 2 & 1 & -2 & 0 & 0 & -12 & 11 \\ 6 & 9 & 3 & 6 & 4 & 0 & 15 \\ -8 & -13 & -6 & -9 & -6 & -8 & -16 \end{pmatrix}$$

.408

$$J = \operatorname{diag}(J_4(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} 2 & 1 & -4 & -4 & -1 & 2 & -5 \\ -3 & -3 & -3 & -3 & -2 & -4 & -3 \\ -1 & 1 & 12 & 12 & 5 & 0 & 14 \\ 1 & 1 & -2 & -2 & -1 & 1 & -3 \\ -8 & -8 & -5 & -6 & -5 & -10 & -5 \\ 7 & 9 & 18 & 19 & 10 & 10 & 20 \\ 2 & 1 & -2 & -2 & 0 & 2 & -2 \end{pmatrix}$$

.409

$$J = \operatorname{diag}(J_4(0), J_3(0))$$

$$P = \begin{pmatrix} -3 & -1 & -1 & -3 & -5 & 0 & 0 \\ 3 & 0 & 12 & -1 & 9 & 6 & 21 \\ -2 & 0 & -6 & 0 & -5 & -3 & -10 \\ -9 & 0 & -24 & 0 & -22 & -12 & -41 \\ 8 & 1 & 17 & 2 & 18 & 8 & 28 \\ 7 & 1 & 16 & 2 & 17 & 7 & 26 \\ 1 & -1 & 6 & -2 & 3 & 4 & 11 \end{pmatrix}$$

.410

$$J = \operatorname{diag}(J_4(0), J_3(0))$$

$$P = \begin{pmatrix} 19 & 12 & 42 & 42 & 30 & 47 & 67 \\ 5 & 3 & 11 & 10 & 8 & 12 & 17 \\ 28 & 18 & 62 & 63 & 44 & 70 & 100 \\ -12 & -8 & -27 & -28 & -19 & -31 & -44 \\ 70 & 45 & 156 & 157 & 111 & 175 & 250 \\ -87 & -55 & -194 & -194 & -138 & -218 & -310 \\ 52 & 33 & 116 & 117 & 82 & 131 & 186 \end{pmatrix}$$

.411

$$J = \operatorname{diag}(J_5(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} 2 & 1 & 2 & 0 & 0 & -1 & 6 \\ 12 & 8 & 15 & 1 & 0 & 3 & 29 \\ 2 & 1 & 2 & 0 & 0 & -1 & 5 \\ 16 & 11 & 21 & 2 & 0 & 7 & 37 \\ 6 & 4 & 8 & 1 & 0 & 4 & 13 \\ 36 & 23 & 46 & 4 & 1 & 12 & 85 \\ 31 & 20 & 40 & 4 & 1 & 12 & 72 \end{pmatrix}$$

.412

$$J = \operatorname{diag}(J_5(0), J_2(0))$$

$$P = \begin{pmatrix} -19 & -5 & -8 & -16 & -19 & -7 & -16 \\ -4 & 2 & 1 & -7 & -2 & -4 & -9 \\ 12 & 2 & 4 & 11 & 11 & 5 & 12 \\ 5 & -1 & 0 & 8 & 4 & 5 & 10 \\ -10 & 1 & -1 & -13 & -8 & -7 & -16 \\ 11 & 3 & 5 & 9 & 11 & 4 & 9 \\ -20 & -7 & -10 & -15 & -21 & -6 & -14 \end{pmatrix}$$

.413

$$J = \operatorname{diag}(J_4(0), J_3(0))$$

$$P = \begin{pmatrix} -4 & -4 & -7 & -7 & -1 & -10 & 1 \\ 11 & -3 & -7 & -15 & 24 & -14 & 34 \\ 7 & -4 & -9 & -15 & 18 & -16 & 27 \\ 6 & -3 & -6 & -11 & 15 & -11 & 22 \\ 14 & -2 & -6 & -15 & 28 & -13 & 39 \\ 0 & 2 & 3 & 4 & -3 & 5 & -5 \\ -7 & 5 & 10 & 17 & -20 & 18 & -30 \end{pmatrix}$$

.414

$$J = \operatorname{diag}(J_5(0), J_1(0), J_1(0))$$

$$P = \begin{pmatrix} -19 & -5 & -23 & -26 & -1 & -28 & -49 \\ -4 & -6 & -1 & -4 & -1 & -9 & -6 \\ 19 & 3 & 25 & 27 & 1 & 27 & 51 \\ 8 & -3 & 14 & 13 & 0 & 9 & 25 \\ 31 & 11 & 36 & 42 & 2 & 48 & 78 \\ -2 & 0 & -3 & -3 & 0 & -3 & -6 \\ 11 & 5 & 12 & 15 & 1 & 18 & 27 \end{pmatrix}$$

.415

$$J = \operatorname{diag}(J_6(0), J_1(0))$$

$$P = \begin{pmatrix} 7 & -3 & -5 & -3 & -6 & 0 & -10 \\ -4 & -3 & -4 & -2 & -5 & -6 & -3 \\ -2 & -3 & -4 & -2 & -4 & -5 & -4 \\ 8 & 8 & 10 & 5 & 12 & 14 & 9 \\ -5 & -2 & -2 & -1 & -2 & -5 & 0 \\ 0 & -4 & -5 & -3 & -5 & -5 & -7 \\ -9 & 7 & 10 & 6 & 11 & 4 & 18 \end{pmatrix}$$

.416

$$J = \operatorname{diag}(J_5(0), J_2(0))$$

$$P = \begin{pmatrix} 9 & 11 & 1 & 12 & 4 & 11 & -3 \\ 0 & 1 & -1 & 4 & 0 & 1 & -4 \\ -27 & -28 & -9 & -20 & -10 & -31 & -12 \\ 26 & 25 & 11 & 11 & 10 & 28 & 20 \\ -16 & -15 & -7 & -6 & -6 & -17 & -13 \\ -7 & -9 & 0 & -12 & -3 & -9 & 5 \\ 14 & 14 & 5 & 9 & 5 & 16 & 8 \end{pmatrix}$$

.417

$$J = \operatorname{diag}(J_3(0), J_2(0), J_2(0))$$

$$P = \begin{pmatrix} 28 & 34 & 7 & 24 & 15 & 38 & 58 \\ -3 & -3 & 2 & -1 & 0 & -3 & -11 \\ 6 & 7 & 1 & 5 & 3 & 8 & 13 \\ 0 & -1 & -1 & -1 & -1 & -1 & 0 \\ 10 & 11 & 3 & 8 & 5 & 13 & 17 \\ 12 & 14 & 3 & 10 & 6 & 16 & 24 \\ -23 & -28 & -9 & -21 & -14 & -32 & -41 \end{pmatrix}$$

.418

$$J = \operatorname{diag}(J_4(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} -1 & -3 & -3 & -3 & -2 & -2 & -3 \\ -1 & -3 & -3 & -3 & -2 & -3 & -3 \\ 21 & 70 & 68 & 83 & 48 & 37 & 85 \\ 1 & 3 & 3 & 4 & 2 & 1 & 4 \\ 1 & 5 & 4 & 6 & 3 & 2 & 6 \\ 11 & 38 & 36 & 46 & 26 & 19 & 47 \\ 9 & 31 & 29 & 37 & 21 & 16 & 38 \end{pmatrix}$$

.419

$$J = \operatorname{diag}(J_3(0), J_2(0), J_2(0))$$

$$P = \begin{pmatrix} -5 & -2 & -2 & -6 & 1 & 1 & -4 \\ -25 & -17 & -14 & -51 & -44 & -42 & -56 \\ -18 & -14 & -11 & -43 & -46 & -44 & -51 \\ 5 & 4 & 3 & 12 & 14 & 13 & 15 \\ -13 & -10 & -8 & -30 & -31 & -30 & -35 \\ -4 & -2 & -2 & -6 & -2 & -2 & -5 \\ 14 & 11 & 9 & 34 & 36 & 35 & 40 \end{pmatrix}$$

.420

$$J = \operatorname{diag}(J_4(0), J_2(0), J_1(0))$$

$$P = \begin{pmatrix} -4 & -1 & -5 & -6 & -7 & -8 & -8 \\ 5 & 1 & 14 & 10 & 15 & 14 & 19 \\ -6 & -1 & -7 & -9 & -10 & -12 & -11 \\ 8 & 3 & 11 & 12 & 15 & 17 & 17 \\ 3 & 1 & 7 & 6 & 8 & 8 & 10 \\ 1 & 0 & 3 & 2 & 3 & 3 & 4 \\ 2 & 0 & 4 & 4 & 5 & 5 & 6 \end{pmatrix}$$

פתרון (תרגיל 2). בפתרונות הבאים מופיעות דוגמאות למטריצות P העונות על השאלה. יכולות להיות מטריצות אחרות מאלו.

.1

$$J = \operatorname{diag}(J_1(0), J_1(-15))$$
$$P = \begin{pmatrix} -1 & -2 \\ -2 & -3 \end{pmatrix}$$

.2

$$J = \operatorname{diag}(J_1(-9), J_1(-14))$$
$$P = \begin{pmatrix} 0 & -1 \\ 1 & 3 \end{pmatrix}$$

.3

$$J = \operatorname{diag}(J_1(8), J_1(-2))$$
$$P = \begin{pmatrix} 0 & -1 \\ 1 & 1 \end{pmatrix}$$

.4

$$J = \operatorname{diag}(J_1(18), J_1(5))$$
$$P = \begin{pmatrix} -1 & 0 \\ -1 & 1 \end{pmatrix}$$

.5

$$J = \operatorname{diag}(J_1(2), J_1(-13))$$
$$P = \begin{pmatrix} -1 & -1 \\ -2 & -3 \end{pmatrix}$$

.6

$$J = \operatorname{diag}(J_1(18), J_1(14))$$
$$P = \begin{pmatrix} 0 & 1 \\ 1 & 3 \end{pmatrix}$$

.7

$$J = \operatorname{diag}(J_1(11), J_1(-6))$$
$$P = \begin{pmatrix} -1 & -1 \\ -2 & -1 \end{pmatrix}$$

.8

$$J = \operatorname{diag}(J_2(-8))$$
$$P = \begin{pmatrix} 0 & 1 \\ 1 & 1 \end{pmatrix}$$

.9

$$J = \operatorname{diag}(J_1(5), J_1(4))$$
$$P = \begin{pmatrix} 1 & 2 \\ 0 & 1 \end{pmatrix}$$

.10

$$J = \operatorname{diag}(J_2(-1))$$
$$P = \begin{pmatrix} -1 & -2 \\ -1 & -1 \end{pmatrix}$$

.11

$$J = \operatorname{diag}(J_2(-7))$$
$$P = \begin{pmatrix} -1 & -2 \\ -2 & -3 \end{pmatrix}$$

.12

$$J = \operatorname{diag}(J_1(-12), J_1(-16))$$
$$P = \begin{pmatrix} 1 & 1 \\ 1 & 0 \end{pmatrix}$$

.13

$$J = \operatorname{diag}(J_2(-7))$$
$$P = \begin{pmatrix} 0 & 1 \\ -1 & -1 \end{pmatrix}$$

.14

$$J = \operatorname{diag}(J_2(-12))$$
$$P = \begin{pmatrix} -1 & -3 \\ -1 & -2 \end{pmatrix}$$

.15

$$J = \operatorname{diag}(J_2(7))$$
$$P = \begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}$$

.16

$$J = \operatorname{diag}(J_2(4))$$
$$P = \begin{pmatrix} -1 & 0 \\ 1 & 1 \end{pmatrix}$$

.17

$$J = \operatorname{diag}(J_2(3))$$
$$P = \begin{pmatrix} 1 & 1 \\ -1 & -2 \end{pmatrix}$$

.18

$$J = \operatorname{diag}(J_1(18), J_1(-18))$$
$$P = \begin{pmatrix} 1 & 3 \\ 0 & -1 \end{pmatrix}$$

.19

$$J = \operatorname{diag}(J_2(6))$$
$$P = \begin{pmatrix} 1 & 3 \\ 0 & -1 \end{pmatrix}$$

.20

$$J = \operatorname{diag}(J_2(2))$$
$$P = \begin{pmatrix} 2 & 1 \\ 1 & 0 \end{pmatrix}$$

.21

$$J = \operatorname{diag}(J_1(18), J_1(17), J_1(16))$$
$$P = \begin{pmatrix} 3 & 2 & 2 \\ -1 & -1 & -1 \\ 1 & 1 & 0 \end{pmatrix}$$

.22

$$J = \operatorname{diag}(J_1(-5), J_1(-8), J_1(-16))$$
$$P = \begin{pmatrix} -3 & -1 & -4 \\ 2 & 1 & 3 \\ 2 & 0 & 3 \end{pmatrix}$$

.23

$$J = \operatorname{diag}(J_2(0), J_1(-6))$$
$$P = \begin{pmatrix} 1 & 2 & 0 \\ 1 & 1 & -1 \\ 0 & -1 & 0 \end{pmatrix}$$

.24

$$J = \operatorname{diag}(J_2(-20), J_1(-20))$$
$$P = \begin{pmatrix} 2 & -1 & 3 \\ 0 & 0 & 1 \\ -1 & 1 & -1 \end{pmatrix}$$

.25

$$J = \operatorname{diag}(J_2(16), J_1(-3))$$
$$P = \begin{pmatrix} 0 & 0 & -1 \\ -1 & 0 & -2 \\ 0 & -1 & 2 \end{pmatrix}$$

.26

$$J = \operatorname{diag}(J_1(10), J_1(-2), J_1(-10))$$
$$P = \begin{pmatrix} 0 & -1 & -2 \\ 1 & 3 & 8 \\ -1 & -4 & -11 \end{pmatrix}$$

.27

$$J = \operatorname{diag}(J_1(9), J_1(1), J_1(-3))$$
$$P = \begin{pmatrix} -1 & -2 & -4 \\ 2 & 3 & 5 \\ -2 & -3 & -6 \end{pmatrix}$$

.28

$$J = \operatorname{diag}(J_3(-5))$$
$$P = \begin{pmatrix} -1 & 1 & 3 \\ 0 & 2 & 3 \\ 0 & -1 & -1 \end{pmatrix}$$

.29

$$J = \operatorname{diag}(J_1(11), J_1(10), J_1(6))$$
$$P = \begin{pmatrix} -1 & -2 & -3 \\ 1 & 2 & 2 \\ -2 & -3 & -4 \end{pmatrix}$$

.30

$$J = \operatorname{diag}(J_3(-19))$$
$$P = \begin{pmatrix} 1 & 0 & 2 \\ 1 & 1 & 1 \\ -2 & 0 & -3 \end{pmatrix}$$

.31

$$J = \operatorname{diag}(J_1(-5), J_1(-15), J_1(-19))$$
$$P = \begin{pmatrix} 1 & 0 & 3 \\ 3 & 1 & 8 \\ 3 & 1 & 7 \end{pmatrix}$$

.32

$$J = \operatorname{diag}(J_2(-17), J_1(-17))$$
$$P = \begin{pmatrix} -1 & 0 & 1 \\ 0 & 1 & 1 \\ 0 & 3 & 2 \end{pmatrix}$$

.33

$$J = \operatorname{diag}(J_2(14), J_1(14))$$
$$P = \begin{pmatrix} 3 & 4 & 9 \\ 2 & 3 & 7 \\ 1 & 1 & 3 \end{pmatrix}$$

.34

$$J = \operatorname{diag}(J_3(6))$$
$$P = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 5 & 2 & -1 \end{pmatrix}$$

.35

$$J = \operatorname{diag}(J_1(0), J_1(0), J_1(-2))$$
$$P = \begin{pmatrix} 1 & 2 & 3 \\ 2 & 3 & 5 \\ 0 & 0 & -1 \end{pmatrix}$$

.36

$$J = \operatorname{diag}(J_1(20), J_1(-4), J_1(-12))$$
$$P = \begin{pmatrix} -2 & -2 & -3 \\ -1 & -1 & -2 \\ -1 & -2 & -2 \end{pmatrix}$$

.37

$$J = \operatorname{diag}(J_1(10), J_1(-10), J_1(-11))$$
$$P = \begin{pmatrix} 1 & 3 & 7 \\ 0 & 1 & 2 \\ 0 & 1 & 3 \end{pmatrix}$$

.38

$$J = \operatorname{diag}(J_2(-13), J_1(-13))$$
$$P = \begin{pmatrix} 3 & 1 & 5 \\ -1 & 0 & -2 \\ -3 & -1 & -4 \end{pmatrix}$$

.39

$$J = \operatorname{diag}(J_1(16), J_1(5), J_1(-11))$$
$$P = \begin{pmatrix} -1 & -1 & -1 \\ 1 & 0 & 3 \\ 0 & 0 & -1 \end{pmatrix}$$

.40

$$J = \operatorname{diag}(J_2(-7), J_1(-7))$$
$$P = \begin{pmatrix} -1 & -1 & -4 \\ 0 & 0 & -1 \\ -1 & 0 & -2 \end{pmatrix}$$

.41

$$J = \operatorname{diag}(J_1(20), J_1(20), J_1(0))$$
$$P = \begin{pmatrix} 2 & 1 & 3 \\ -1 & -1 & -2 \\ -1 & -1 & -1 \end{pmatrix}$$

.42

$$J = \operatorname{diag}(J_1(20), J_1(-4), J_1(-14))$$
$$P = \begin{pmatrix} 0 & 0 & -1 \\ 0 & 1 & 1 \\ 1 & 0 & -1 \end{pmatrix}$$

.43

$$J = \operatorname{diag}(J_2(10), J_1(10))$$
$$P = \begin{pmatrix} -1 & 3 & 1 \\ 1 & -3 & -2 \\ 1 & -2 & -1 \end{pmatrix}$$

.44

$$J = \operatorname{diag}(J_1(9), J_1(5), J_1(2))$$
$$P = \begin{pmatrix} -1 & 1 & 1 \\ 1 & 0 & 1 \\ -1 & 1 & 2 \end{pmatrix}$$

.45

$$J = \operatorname{diag}(J_1(9), J_1(9), J_1(-13))$$
$$P = \begin{pmatrix} -3 & -3 & -1 \\ -2 & -2 & -1 \\ -7 & -8 & -3 \end{pmatrix}$$

.46

$$J = \operatorname{diag}(J_2(15), J_1(15))$$
$$P = \begin{pmatrix} -1 & -2 & 0 \\ -2 & -3 & 0 \\ 1 & 1 & 1 \end{pmatrix}$$

.47

$$J = \operatorname{diag}(J_1(18), J_1(13), J_1(-11))$$
$$P = \begin{pmatrix} -1 & 1 & 1 \\ -1 & 0 & 0 \\ 1 & -2 & -3 \end{pmatrix}$$

.48

$$J = \operatorname{diag}(J_2(10), J_1(-7))$$
$$P = \begin{pmatrix} -1 & 0 & -2 \\ 1 & 1 & 2 \\ -2 & 0 & -3 \end{pmatrix}$$

.49

$$J = \operatorname{diag}(J_2(0), J_1(0))$$
$$P = \begin{pmatrix} 0 & 1 & 1 \\ 0 & 1 & 2 \\ -1 & -3 & -3 \end{pmatrix}$$

.50

$$J = \operatorname{diag}(J_3(-3))$$
$$P = \begin{pmatrix} -1 & -3 & -5 \\ -1 & -4 & -6 \\ 0 & 1 & 2 \end{pmatrix}$$

.51

$$J = \operatorname{diag}(J_1(-6), J_1(-6), J_1(-12))$$
$$P = \begin{pmatrix} 2 & 5 & 9 \\ -1 & -3 & -5 \\ -3 & -7 & -12 \end{pmatrix}$$

.52

$$J = \operatorname{diag}(J_1(16), J_1(15), J_1(-3))$$
$$P = \begin{pmatrix} 2 & 1 & 4 \\ 2 & 1 & 3 \\ 1 & 0 & 2 \end{pmatrix}$$

.53

$$J = \operatorname{diag}(J_3(-19))$$
$$P = \begin{pmatrix} -7 & -6 & -9 \\ 5 & 4 & 6 \\ 8 & 7 & 10 \end{pmatrix}$$

.54

$$J = \operatorname{diag}(J_2(9), J_1(-2))$$
$$P = \begin{pmatrix} 3 & 5 & 1 \\ -1 & -2 & -1 \\ -1 & -2 & 0 \end{pmatrix}$$

.55

$$J = \operatorname{diag}(J_1(15), J_1(15), J_1(13))$$
$$P = \begin{pmatrix} 3 & 1 & 9 \\ 2 & 1 & 7 \\ -3 & -1 & -10 \end{pmatrix}$$

.56

$$J = \operatorname{diag}(J_1(18), J_1(16), J_1(12))$$
$$P = \begin{pmatrix} 1 & 1 & 2 \\ 0 & 1 & 0 \\ 1 & 0 & 1 \end{pmatrix}$$

.57

$$J = \operatorname{diag}(J_1(10), J_1(0), J_1(-14))$$
$$P = \begin{pmatrix} 1 & 0 & 1 \\ 1 & 1 & 2 \\ 0 & 0 & -1 \end{pmatrix}$$

.58

$$J = \operatorname{diag}(J_1(9), J_1(-2), J_1(-8))$$
$$P = \begin{pmatrix} 4 & 7 & 9 \\ 3 & 5 & 6 \\ -2 & -3 & -4 \end{pmatrix}$$

.59

$$J = \operatorname{diag}(J_1(20), J_1(6), J_1(-17))$$
$$P = \begin{pmatrix} 0 & 1 & 1 \\ -1 & 0 & -1 \\ 0 & 0 & 1 \end{pmatrix}$$

.60

$$J = \operatorname{diag}(J_2(17), J_1(17))$$
$$P = \begin{pmatrix} -3 & -1 & -4 \\ -6 & -2 & -7 \\ 1 & 0 & 1 \end{pmatrix}$$

.61

$$J = \operatorname{diag}(J_1(-12), J_1(-12), J_1(-15))$$
$$P = \begin{pmatrix} 1 & 3 & 9 \\ 0 & -1 & -3 \\ -1 & -3 & -10 \end{pmatrix}$$

.62

$$J = \operatorname{diag}(J_3(6))$$
$$P = \begin{pmatrix} -1 & -3 & -3 \\ 3 & 5 & 6 \\ 3 & 6 & 7 \end{pmatrix}$$

.63

$$J = \operatorname{diag}(J_1(-1), J_1(-1), J_1(-18))$$
$$P = \begin{pmatrix} 1 & 1 & 1 \\ -1 & -2 & -1 \\ 0 & 0 & -1 \end{pmatrix}$$

.64

$$J = \operatorname{diag}(J_1(6), J_1(-2), J_1(-19))$$
$$P = \begin{pmatrix} -2 & -1 & -4 \\ -1 & 0 & -2 \\ -1 & 0 & -1 \end{pmatrix}$$

.65

$$J = \operatorname{diag}(J_3(-12))$$
$$P = \begin{pmatrix} -3 & -2 & -3 \\ -3 & -2 & -2 \\ 2 & 1 & 1 \end{pmatrix}$$

.66

$$J = \operatorname{diag}(J_1(18), J_1(13), J_1(8))$$
$$P = \begin{pmatrix} 0 & 0 & 1 \\ -1 & -1 & -2 \\ -1 & 0 & -2 \end{pmatrix}$$

.67

$$J = \operatorname{diag}(J_2(4), J_1(-5))$$
$$P = \begin{pmatrix} -1 & 0 & -3 \\ 0 & 0 & 1 \\ -1 & -1 & -3 \end{pmatrix}$$

.68

$$J = \operatorname{diag}(J_1(17), J_1(10), J_1(-9))$$
$$P = \begin{pmatrix} 0 & 1 & 1 \\ 1 & 2 & 1 \\ 1 & 1 & 1 \end{pmatrix}$$

.69

$$J = \operatorname{diag}(J_3(-9))$$
$$P = \begin{pmatrix} 2 & 2 & -1 \\ 0 & -1 & 0 \\ -3 & -4 & 2 \end{pmatrix}$$

.70

$$J = \operatorname{diag}(J_1(17), J_1(17), J_1(13))$$
$$P = \begin{pmatrix} -1 & -1 & 0 \\ 0 & -1 & -2 \\ -1 & -2 & -1 \end{pmatrix}$$

.71

$$J = \operatorname{diag}(J_3(-2))$$
$$P = \begin{pmatrix} 0 & 2 & 3 \\ -1 & -2 & -3 \\ 1 & 1 & 2 \end{pmatrix}$$

.72

$$J = \operatorname{diag}(J_2(-1), J_1(-11))$$
$$P = \begin{pmatrix} 2 & 1 & 2 \\ -1 & -1 & -1 \\ 0 & 0 & -1 \end{pmatrix}$$

.73

$$J = \operatorname{diag}(J_2(-10), J_1(-10))$$
$$P = \begin{pmatrix} 0 & 1 & 0 \\ 0 & -1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$$

.74

$$J = \operatorname{diag}(J_1(15), J_1(15), J_1(-4))$$
$$P = \begin{pmatrix} -1 & -1 & -2 \\ 1 & 2 & 5 \\ -1 & -1 & -3 \end{pmatrix}$$

.75

$$J = \operatorname{diag}(J_2(12), J_1(12))$$
$$P = \begin{pmatrix} 1 & -2 & -1 \\ 1 & -3 & 0 \\ 1 & -2 & 0 \end{pmatrix}$$

.76

$$J = \operatorname{diag}(J_1(11), J_1(-4), J_1(-10))$$
$$P = \begin{pmatrix} 0 & 0 & 1 \\ 1 & 2 & -1 \\ 1 & 1 & 1 \end{pmatrix}$$

.77

$$J = \operatorname{diag}(J_1(12), J_1(7), J_1(4))$$
$$P = \begin{pmatrix} 1 & 2 & -1 \\ -1 & -3 & 1 \\ -3 & -6 & 2 \end{pmatrix}$$

.78

$$J = \operatorname{diag}(J_1(20), J_1(6), J_1(-6))$$
$$P = \begin{pmatrix} 1 & 1 & 2 \\ -2 & -1 & -2 \\ -1 & -1 & -1 \end{pmatrix}$$

.79

$$J = \operatorname{diag}(J_2(-11), J_1(-11))$$
$$P = \begin{pmatrix} -3 & -3 & -5 \\ -3 & -2 & -4 \\ 1 & 1 & 2 \end{pmatrix}$$

.80

$$J = \operatorname{diag}(J_2(15), J_1(-4))$$
$$P = \begin{pmatrix} 5 & 4 & 7 \\ 1 & 1 & 1 \\ 4 & 3 & 5 \end{pmatrix}$$

.81

$$J = \operatorname{diag}(J_2(-10), J_1(-10))$$
$$P = \begin{pmatrix} 3 & 6 & 1 \\ 0 & 1 & 0 \\ -1 & -3 & 0 \end{pmatrix}$$

.82

$$J = \operatorname{diag}(J_3(-16))$$
$$P = \begin{pmatrix} -1 & -1 & 1 \\ 1 & 0 & -2 \\ 0 & 1 & 0 \end{pmatrix}$$

.83

$$J = \operatorname{diag}(J_2(12), J_1(11))$$
$$P = \begin{pmatrix} 3 & 3 & 4 \\ -5 & -4 & -6 \\ -2 & -2 & -3 \end{pmatrix}$$

.84

$$J = \operatorname{diag}(J_2(-2), J_1(-2))$$
$$P = \begin{pmatrix} -3 & -5 & -7 \\ -3 & -4 & -6 \\ -2 & -3 & -4 \end{pmatrix}$$

.85

$$J = \operatorname{diag}(J_1(18), J_1(-4), J_1(-8))$$
$$P = \begin{pmatrix} -1 & -1 & -1 \\ 0 & -1 & -1 \\ 0 & 0 & 1 \end{pmatrix}$$

.86

$$J = \operatorname{diag}(J_1(4), J_1(3), J_1(-20))$$
$$P = \begin{pmatrix} -1 & -2 & -3 \\ 0 & 1 & 2 \\ -1 & -1 & 0 \end{pmatrix}$$

.87

$$J = \operatorname{diag}(J_2(15), J_1(9))$$
$$P = \begin{pmatrix} 0 & 0 & -1 \\ -1 & -1 & -3 \\ 1 & 0 & 1 \end{pmatrix}$$

.88

$$J = \operatorname{diag}(J_2(-5), J_1(-15))$$
$$P = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 0 & 1 \\ 1 & 2 & 2 \end{pmatrix}$$

.89

$$J = \operatorname{diag}(J_3(15))$$
$$P = \begin{pmatrix} -2 & -1 & -2 \\ 3 & 3 & 4 \\ -4 & -3 & -5 \end{pmatrix}$$

.90

$$J = \operatorname{diag}(J_2(-3), J_1(-17))$$
$$P = \begin{pmatrix} -2 & -1 & -3 \\ 1 & 0 & 1 \\ -2 & -1 & -4 \end{pmatrix}$$

.91

$$J = \operatorname{diag}(J_2(17), J_1(-17))$$
$$P = \begin{pmatrix} 1 & 2 & 2 \\ 1 & 2 & 1 \\ -2 & -5 & -4 \end{pmatrix}$$

.92

$$J = \operatorname{diag}(J_2(-13), J_1(-15))$$
$$P = \begin{pmatrix} -2 & -1 & -6 \\ -3 & -1 & -9 \\ 1 & 0 & 2 \end{pmatrix}$$

.93

$$J = \operatorname{diag}(J_1(13), J_1(3), J_1(2))$$
$$P = \begin{pmatrix} 1 & 0 & 3 \\ 0 & -1 & 1 \\ 0 & 0 & -1 \end{pmatrix}$$

.94

$$J = \operatorname{diag}(J_1(20), J_1(-8), J_1(-11))$$
$$P = \begin{pmatrix} 1 & 1 & 0 \\ 3 & 5 & 1 \\ -1 & -2 & 0 \end{pmatrix}$$

.95

$$J = \operatorname{diag}(J_1(-9), J_1(-9), J_1(-13))$$
$$P = \begin{pmatrix} 1 & 0 & 1 \\ 2 & -2 & 3 \\ -2 & 1 & -3 \end{pmatrix}$$

.96

$$J = \operatorname{diag}(J_1(9), J_1(-2), J_1(-15))$$
$$P = \begin{pmatrix} -1 & -1 & -3 \\ -1 & -1 & -2 \\ 0 & -1 & 0 \end{pmatrix}$$

.97

$$J = \operatorname{diag}(J_2(-7), J_1(-7))$$
$$P = \begin{pmatrix} -3 & 1 & -3 \\ -5 & 1 & -6 \\ -1 & 0 & -1 \end{pmatrix}$$

.98

$$J = \operatorname{diag}(J_3(-17))$$
$$P = \begin{pmatrix} 3 & -1 & 5 \\ 1 & 0 & 1 \\ 3 & -1 & 6 \end{pmatrix}$$

.99

$$J = \operatorname{diag}(J_3(15))$$
$$P = \begin{pmatrix} -1 & 0 & -1 \\ 5 & -2 & 4 \\ -7 & 3 & -5 \end{pmatrix}$$

.100

$$J = \operatorname{diag}(J_1(16), J_1(16), J_1(-10))$$
$$P = \begin{pmatrix} -1 & 1 & 0 \\ -2 & 2 & 1 \\ -5 & 4 & 1 \end{pmatrix}$$

.101

$$J = \operatorname{diag}(J_2(2), J_1(2))$$
$$P = \begin{pmatrix} -4 & -1 & -6 \\ 5 & 1 & 8 \\ -2 & 0 & -3 \end{pmatrix}$$

.102

$$J = \operatorname{diag}(J_2(8), J_1(-9))$$
$$P = \begin{pmatrix} -2 & -2 & -3 \\ -3 & -2 & -3 \\ 0 & -1 & -1 \end{pmatrix}$$

.103

$$J = \operatorname{diag}(J_2(-1), J_1(-1))$$
$$P = \begin{pmatrix} -1 & 1 & 0 \\ 0 & -2 & -1 \\ 1 & -2 & -1 \end{pmatrix}$$

.104

$$J = \operatorname{diag}(J_3(-12))$$
$$P = \begin{pmatrix} -1 & -3 & -6 \\ -1 & -4 & -7 \\ 0 & -2 & -3 \end{pmatrix}$$

.105

$$J = \operatorname{diag}(J_1(-8), J_1(-8), J_1(-20))$$
$$P = \begin{pmatrix} 0 & -1 & -1 \\ 1 & 3 & 4 \\ 0 & 0 & -1 \end{pmatrix}$$

.106

$$J = \operatorname{diag}(J_1(15), J_1(9), J_1(-8))$$
$$P = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 0 & 1 \\ -1 & 0 & 0 \end{pmatrix}$$

.107

$$J = \operatorname{diag}(J_2(18), J_1(18))$$
$$P = \begin{pmatrix} -9 & -11 & -12 \\ 2 & 3 & 3 \\ 1 & 1 & 1 \end{pmatrix}$$

.108

$$J = \operatorname{diag}(J_1(14), J_1(14), J_1(-3))$$
$$P = \begin{pmatrix} -1 & -3 & 1 \\ 0 & 0 & 1 \\ 1 & 2 & 0 \end{pmatrix}$$

.109

$$J = \operatorname{diag}(J_1(9), J_1(9), J_1(1))$$
$$P = \begin{pmatrix} 1 & 2 & 3 \\ 0 & 1 & 1 \\ -1 & -2 & -4 \end{pmatrix}$$

.110

$$J = \operatorname{diag}(J_1(17), J_1(17), J_1(-8))$$
$$P = \begin{pmatrix} 0 & -1 & -1 \\ 1 & 0 & -1 \\ 0 & 0 & -1 \end{pmatrix}$$

.111

$$J = \operatorname{diag}(J_1(6), J_1(6), J_1(-8))$$
$$P = \begin{pmatrix} 1 & 1 & 3 \\ 0 & 0 & 1 \\ -1 & -2 & -3 \end{pmatrix}$$

.112

$$J = \operatorname{diag}(J_2(-12), J_1(-12))$$
$$P = \begin{pmatrix} -1 & -1 & -1 \\ 0 & -1 & -1 \\ -3 & -4 & -5 \end{pmatrix}$$

.113

$$J = \operatorname{diag}(J_2(-7), J_1(-10))$$
$$P = \begin{pmatrix} 2 & 2 & 3 \\ -2 & -1 & -2 \\ -5 & -4 & -6 \end{pmatrix}$$

.114

$$J = \operatorname{diag}(J_1(20), J_1(-6), J_1(-11))$$
$$P = \begin{pmatrix} -1 & -1 & 0 \\ -1 & -2 & 1 \\ 1 & 2 & 0 \end{pmatrix}$$

.115

$$J = \operatorname{diag}(J_1(16), J_1(7), J_1(-7))$$
$$P = \begin{pmatrix} -1 & -2 & 0 \\ 0 & 0 & -1 \\ 1 & 3 & -1 \end{pmatrix}$$

.116

$$J = \operatorname{diag}(J_3(2))$$
$$P = \begin{pmatrix} 1 & 2 & 2 \\ 0 & 1 & 0 \\ -1 & -2 & -3 \end{pmatrix}$$

.117

$$J = \operatorname{diag}(J_3(-18))$$
$$P = \begin{pmatrix} 7 & 3 & 9 \\ -2 & -1 & -3 \\ -1 & 0 & -1 \end{pmatrix}$$

.118

$$J = \operatorname{diag}(J_3(5))$$
$$P = \begin{pmatrix} 1 & 1 & 1 \\ -2 & -1 & -1 \\ 1 & 0 & 1 \end{pmatrix}$$

.119

$$J = \operatorname{diag}(J_2(12), J_1(8))$$
$$P = \begin{pmatrix} 2 & 0 & 1 \\ 1 & 0 & 1 \\ 0 & 1 & 1 \end{pmatrix}$$

.120

$$J = \operatorname{diag}(J_1(2), J_1(-7), J_1(-15))$$
$$P = \begin{pmatrix} -5 & -12 & -1 \\ 1 & 2 & 0 \\ -1 & -3 & 0 \end{pmatrix}$$

.121

$$J = \operatorname{diag}(J_1(17), J_1(17), J_1(4), J_1(-9))$$
$$P = \begin{pmatrix} -1 & -2 & -3 & 1 \\ 1 & -1 & 0 & 1 \\ 0 & 0 & -1 & 0 \\ -1 & 0 & -1 & 0 \end{pmatrix}$$

.122

$$J = \operatorname{diag}(J_4(11))$$
$$P = \begin{pmatrix} 13 & 5 & 10 & 14 \\ 15 & 6 & 11 & 15 \\ -20 & -8 & -15 & -21 \\ -3 & -1 & -2 & -3 \end{pmatrix}$$

.123

$$J = \operatorname{diag}(J_3(-4), J_1(-4))$$
$$P = \begin{pmatrix} -1 & -1 & -2 & -2 \\ 0 & -1 & -3 & 0 \\ 1 & 1 & 3 & 2 \\ -1 & -2 & -7 & -1 \end{pmatrix}$$

.124

$$J = \operatorname{diag}(J_2(15), J_1(15), J_1(15))$$
$$P = \begin{pmatrix} 1 & -7 & -7 & 4 \\ 1 & -6 & -5 & 4 \\ 0 & 1 & 0 & -1 \\ 0 & -2 & -3 & 1 \end{pmatrix}$$

.125

$$J = \operatorname{diag}(J_2(3), J_2(1))$$
$$P = \begin{pmatrix} -2 & -1 & -2 & 1 \\ -1 & -1 & -2 & 1 \\ 3 & 2 & 3 & -3 \\ 1 & 1 & 1 & -1 \end{pmatrix}$$

.126

$$J = \operatorname{diag}(J_1(13), J_1(-3), J_1(-19), J_1(-20))$$
$$P = \begin{pmatrix} -1 & 0 & -2 & -2 \\ 1 & 1 & 2 & 2 \\ 0 & -1 & 1 & 1 \\ 1 & 1 & 0 & 1 \end{pmatrix}$$

.127

$$J = \operatorname{diag}(J_2(-6), J_2(-20))$$
$$P = \begin{pmatrix} -2 & 0 & -1 & -2 \\ 2 & 2 & 0 & 3 \\ 1 & 2 & -1 & 2 \\ 0 & 3 & -2 & 1 \end{pmatrix}$$

.128

$$J = \operatorname{diag}(J_1(8), J_1(5), J_1(-3), J_1(-18))$$
$$P = \begin{pmatrix} 1 & 1 & 1 & 0 \\ 0 & -3 & -5 & 1 \\ 0 & 2 & 3 & -1 \\ 0 & 0 & 1 & 0 \end{pmatrix}$$

.129

$$J = \operatorname{diag}(J_2(12), J_1(12), J_1(-12))$$
$$P = \begin{pmatrix} 4 & 2 & 9 & -1 \\ 2 & 1 & 5 & -1 \\ 1 & 1 & 2 & 0 \\ 1 & 0 & 4 & -1 \end{pmatrix}$$

.130

$$J = \operatorname{diag}(J_3(3), J_1(3))$$
$$P = \begin{pmatrix} 0 & -2 & -1 & -3 \\ 0 & 2 & 1 & 2 \\ 1 & 1 & 2 & -1 \\ 0 & 1 & 0 & 2 \end{pmatrix}$$

.131

$$J = \operatorname{diag}(J_1(17), J_1(12), J_1(-14), J_1(-16))$$
$$P = \begin{pmatrix} 0 & 1 & 0 & 0 \\ 1 & 1 & -1 & 2 \\ 0 & -2 & -2 & 1 \\ 0 & -2 & -1 & 0 \end{pmatrix}$$

.132

$$J = \operatorname{diag}(J_2(4), J_1(4), J_1(-9))$$
$$P = \begin{pmatrix} 2 & 2 & 1 & 9 \\ -1 & -1 & -1 & -6 \\ -1 & 0 & 1 & 0 \\ 2 & 1 & 0 & 5 \end{pmatrix}$$

.133

$$J = \operatorname{diag}(J_2(-8), J_1(-8), J_1(-17))$$
$$P = \begin{pmatrix} -1 & -2 & 0 & -1 \\ 1 & 1 & 0 & -1 \\ 0 & 0 & -1 & -1 \\ 1 & 1 & 0 & 0 \end{pmatrix}$$

.134

$$J = \operatorname{diag}(J_2(2), J_2(0))$$
$$P = \begin{pmatrix} 0 & -1 & 0 & 0 \\ 1 & 1 & 1 & 0 \\ 0 & -1 & 1 & 3 \\ 0 & 1 & -1 & -2 \end{pmatrix}$$

.135

$$J = \operatorname{diag}(J_3(-8), J_1(-18))$$
$$P = \begin{pmatrix} -1 & -3 & -5 & -6 \\ 1 & 2 & 3 & 3 \\ 0 & 0 & -1 & -1 \\ 0 & 0 & -2 & -3 \end{pmatrix}$$

.136

$$J = \operatorname{diag}(J_1(17), J_1(17), J_2(3))$$
$$P = \begin{pmatrix} 2 & 1 & -2 & -3 \\ 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 \\ 3 & 2 & -3 & -5 \end{pmatrix}$$

.137

$$J = \operatorname{diag}(J_2(-4), J_1(-8), J_1(-8))$$
$$P = \begin{pmatrix} -8 & -3 & -1 & -9 \\ 15 & 6 & 2 & 16 \\ 7 & 3 & 1 & 8 \\ 20 & 8 & 3 & 22 \end{pmatrix}$$

.138

$$J = \operatorname{diag}(J_2(20), J_1(20), J_1(20))$$
$$P = \begin{pmatrix} -2 & -3 & 0 & 1 \\ -2 & -3 & -1 & -2 \\ -5 & -8 & -1 & -1 \\ 2 & 3 & 0 & 0 \end{pmatrix}$$

.139

$$J = \operatorname{diag}(J_2(-5), J_1(-5), J_1(-5))$$
$$P = \begin{pmatrix} -2 & -2 & -3 & -3 \\ 1 & 0 & 1 & 0 \\ 5 & 5 & 7 & 8 \\ 10 & 9 & 14 & 15 \end{pmatrix}$$

.140

$$J = \operatorname{diag}(J_3(3), J_1(3))$$
$$P = \begin{pmatrix} 1 & 2 & 2 & 0 \\ 0 & -1 & -1 & 1 \\ 1 & 1 & 2 & 0 \\ 0 & 1 & 0 & 1 \end{pmatrix}$$

.141

$$J = \operatorname{diag}(J_1(19), J_1(19), J_1(-4), J_1(-15))$$
$$P = \begin{pmatrix} 0 & 0 & 1 & 1 \\ -1 & 0 & -3 & -5 \\ 0 & -1 & 1 & 2 \\ 0 & 0 & 0 & -1 \end{pmatrix}$$

.142

$$J = \operatorname{diag}(J_1(19), J_1(19), J_1(5), J_1(-15))$$
$$P = \begin{pmatrix} 0 & -1 & -1 & -2 \\ 1 & -1 & 1 & -2 \\ -1 & -2 & -3 & -3 \\ -1 & -1 & -2 & -2 \end{pmatrix}$$

.143

$$J = \operatorname{diag}(J_1(5), J_1(5), J_1(0), J_1(-17))$$
$$P = \begin{pmatrix} 3 & 3 & 2 & 3 \\ -2 & -2 & -1 & -2 \\ 3 & 5 & 1 & 2 \\ -1 & -2 & 0 & 0 \end{pmatrix}$$

.144

$$J = \operatorname{diag}(J_3(-10), J_1(-10))$$
$$P = \begin{pmatrix} -4 & -5 & -5 & -6 \\ 4 & 6 & 5 & 7 \\ 1 & 1 & 1 & 1 \\ 2 & 4 & 2 & 5 \end{pmatrix}$$

.145

$$J = \operatorname{diag}(J_3(20), J_1(20))$$
$$P = \begin{pmatrix} -1 & -1 & -3 & -3 \\ -7 & -6 & -15 & -18 \\ 2 & 2 & 5 & 6 \\ 5 & 5 & 12 & 14 \end{pmatrix}$$

.146

$$J = \operatorname{diag}(J_2(-3), J_1(-11), J_1(-18))$$
$$P = \begin{pmatrix} 0 & -2 & -3 & -4 \\ -1 & -7 & -11 & -13 \\ 0 & 1 & 1 & 1 \\ -1 & -5 & -8 & -10 \end{pmatrix}$$

.147

$$J = \operatorname{diag}(J_1(16), J_1(-13), J_1(-15), J_1(-19))$$
$$P = \begin{pmatrix} 0 & 0 & -1 & 0 \\ -1 & -1 & 0 & -3 \\ -1 & 0 & 1 & -2 \\ 0 & -1 & -1 & 0 \end{pmatrix}$$

.148

$$J = \operatorname{diag}(J_2(12), J_1(12), J_1(9))$$
$$P = \begin{pmatrix} 0 & -3 & -5 & -6 \\ -1 & -4 & -7 & -9 \\ 1 & 9 & 15 & 18 \\ 0 & -4 & -6 & -7 \end{pmatrix}$$

.149

$$J = \operatorname{diag}(J_1(-5), J_1(-5), J_1(-13), J_1(-16))$$
$$P = \begin{pmatrix} 1 & 0 & 0 & 1 \\ -5 & -5 & -1 & -8 \\ 0 & 1 & 0 & 1 \\ -2 & -2 & 0 & -3 \end{pmatrix}$$

.150

$$J = \operatorname{diag}(J_1(18), J_1(3), J_1(2), J_1(-4))$$
$$P = \begin{pmatrix} -1 & 0 & -2 & 1 \\ 3 & 1 & 5 & 0 \\ -1 & 1 & -2 & 2 \\ 2 & 0 & 4 & -1 \end{pmatrix}$$

.151

$$J = \operatorname{diag}(J_1(10), J_1(-1), J_1(-10), J_1(-17))$$
$$P = \begin{pmatrix} 1 & -3 & -1 & -3 \\ 0 & -2 & -1 & -2 \\ -1 & 2 & 0 & 2 \\ 0 & 4 & 2 & 5 \end{pmatrix}$$

.152

$$J = \operatorname{diag}(J_1(16), J_1(11), J_1(10), J_1(4))$$
$$P = \begin{pmatrix} 2 & -1 & -2 & 3 \\ -2 & 2 & 3 & -3 \\ -2 & 2 & 2 & -3 \\ -3 & 3 & 4 & -5 \end{pmatrix}$$

.153

$$J = \operatorname{diag}(J_1(9), J_1(9), J_1(4), J_1(3))$$
$$P = \begin{pmatrix} 4 & 3 & 5 & 5 \\ 1 & 1 & 1 & 2 \\ 2 & 2 & 2 & 3 \\ -1 & -1 & -2 & -1 \end{pmatrix}$$

.154

$$J = \operatorname{diag}(J_1(18), J_1(8), J_1(4), J_1(-17))$$
$$P = \begin{pmatrix} 0 & -1 & -1 & 0 \\ 0 & -1 & 0 & 0 \\ -1 & -1 & -1 & -3 \\ 1 & 2 & 1 & 2 \end{pmatrix}$$

.155

$$J = \operatorname{diag}(J_1(17), J_1(8), J_1(-1), J_1(-17))$$
$$P = \begin{pmatrix} 1 & 2 & 2 & 3 \\ 1 & 3 & 4 & 3 \\ 0 & -1 & -1 & 0 \\ -1 & -2 & -2 & -2 \end{pmatrix}$$

.156

$$J = \operatorname{diag}(J_2(-16), J_2(-16))$$
$$P = \begin{pmatrix} 8 & 7 & 16 & 29 \\ 2 & 2 & 4 & 7 \\ 1 & 1 & 2 & 4 \\ -1 & -1 & -1 & -2 \end{pmatrix}$$

.157

$$J = \operatorname{diag}(J_1(18), J_1(18), J_1(-4), J_1(-5))$$
$$P = \begin{pmatrix} -3 & 1 & 0 & 0 \\ -1 & -2 & -2 & -3 \\ -1 & -1 & -1 & -2 \\ 0 & -2 & -2 & -3 \end{pmatrix}$$

.158

$$J = \operatorname{diag}(J_2(-4), J_1(-4), J_1(-4))$$
$$P = \begin{pmatrix} 8 & -4 & -7 & 11 \\ 1 & -1 & -2 & 1 \\ 4 & -2 & -3 & 6 \\ 2 & -1 & -2 & 3 \end{pmatrix}$$

.159

$$J = \operatorname{diag}(J_2(-11), J_2(-11))$$
$$P = \begin{pmatrix} -3 & 3 & 2 & 0 \\ -4 & 1 & 1 & -2 \\ 4 & 0 & 0 & 3 \\ -6 & 3 & 2 & -2 \end{pmatrix}$$

.160

$$J = \operatorname{diag}(J_2(10), J_1(-2), J_1(-9))$$
$$P = \begin{pmatrix} 3 & 4 & 1 & 4 \\ 5 & 6 & 2 & 7 \\ 0 & 0 & 0 & -1 \\ -6 & -7 & -2 & -7 \end{pmatrix}$$

.161

$$J = \operatorname{diag}(J_3(17), J_1(17))$$
$$P = \begin{pmatrix} 0 & 0 & 1 & 1 \\ 2 & 3 & -2 & -3 \\ 1 & 1 & 1 & 1 \\ 0 & 0 & 2 & 3 \end{pmatrix}$$

.162

$$J = \operatorname{diag}(J_2(-9), J_1(-9), J_1(-10))$$
$$P = \begin{pmatrix} -8 & -13 & -15 & -35 \\ -1 & -2 & -2 & -5 \\ 7 & 12 & 14 & 32 \\ -4 & -7 & -8 & -18 \end{pmatrix}$$

.163

$$J = \operatorname{diag}(J_2(9), J_1(9), J_1(-18))$$
$$P = \begin{pmatrix} -3 & -3 & -1 & -6 \\ 1 & 2 & 0 & 1 \\ 3 & 4 & 1 & 5 \\ 1 & 2 & 0 & 0 \end{pmatrix}$$

.164

$$J = \operatorname{diag}(J_2(-5), J_1(-13), J_1(-17))$$
$$P = \begin{pmatrix} 2 & 9 & 5 & 13 \\ 0 & -1 & 0 & -1 \\ -1 & -3 & -2 & -4 \\ -1 & -4 & -2 & -6 \end{pmatrix}$$

.165

$$J = \operatorname{diag}(J_1(6), J_1(-3), J_1(-9), J_1(-11))$$
$$P = \begin{pmatrix} -1 & -2 & -2 & -4 \\ 0 & 0 & 1 & 1 \\ 2 & 3 & 6 & 8 \\ -2 & -3 & -4 & -7 \end{pmatrix}$$

.166

$$J = \operatorname{diag}(J_2(14), J_1(14), J_1(14))$$
$$P = \begin{pmatrix} -6 & -9 & -1 & -11 \\ -3 & -5 & 0 & -6 \\ -4 & -6 & -1 & -7 \\ 3 & 5 & 1 & 6 \end{pmatrix}$$

.167

$$J = \operatorname{diag}(J_1(18), J_1(-6), J_1(-11), J_1(-20))$$
$$P = \begin{pmatrix} -3 & 1 & 3 & 4 \\ -5 & 2 & 4 & 5 \\ 1 & 0 & 0 & 0 \\ 0 & 0 & -1 & -1 \end{pmatrix}$$

.168

$$J = \operatorname{diag}(J_1(15), J_1(-3), J_1(-5), J_1(-11))$$
$$P = \begin{pmatrix} 1 & 1 & 1 & 4 \\ 0 & -1 & 0 & 1 \\ -1 & -2 & 0 & 0 \\ 1 & 2 & 0 & 1 \end{pmatrix}$$

.169

$$J = \operatorname{diag}(J_1(8), J_1(-2), J_1(-16), J_1(-17))$$
$$P = \begin{pmatrix} 3 & 2 & 3 & 3 \\ -3 & -1 & -3 & -2 \\ -4 & -2 & -4 & -3 \\ 3 & 3 & 2 & 3 \end{pmatrix}$$

.170

$$J = \operatorname{diag}(J_1(5), J_1(0), J_1(-11), J_1(-15))$$
$$P = \begin{pmatrix} -1 & 0 & 1 & 0 \\ -1 & 1 & 3 & 0 \\ -1 & 0 & 1 & -1 \\ -1 & -1 & 0 & -1 \end{pmatrix}$$

.171

$$J = \operatorname{diag}(J_3(5), J_1(-3))$$
$$P = \begin{pmatrix} -1 & -3 & -1 & -3 \\ 2 & 7 & 3 & 7 \\ 1 & 4 & 2 & 3 \\ 3 & 11 & 4 & 12 \end{pmatrix}$$

.172

$$J = \operatorname{diag}(J_2(6), J_1(-2), J_1(-14))$$
$$P = \begin{pmatrix} 1 & 2 & 0 & 7 \\ 1 & 2 & 1 & 5 \\ 0 & -1 & -1 & 0 \\ 0 & -1 & 0 & -3 \end{pmatrix}$$

.173

$$J = \operatorname{diag}(J_2(-1), J_1(-1), J_1(-9))$$
$$P = \begin{pmatrix} -1 & -2 & -1 & -1 \\ -4 & -5 & -3 & -7 \\ -2 & -3 & -2 & -4 \\ -1 & -1 & -1 & -2 \end{pmatrix}$$

.174

$$J = \operatorname{diag}(J_1(9), J_1(-7), J_1(-10), J_1(-11))$$
$$P = \begin{pmatrix} 0 & 0 & -1 & 2 \\ -2 & -3 & -5 & 1 \\ 0 & 0 & 0 & -1 \\ -1 & -1 & -1 & -2 \end{pmatrix}$$

.175

$$J = \operatorname{diag}(J_1(17), J_1(5), J_1(3), J_1(-16))$$
$$P = \begin{pmatrix} 3 & 1 & 3 & 3 \\ 1 & 0 & 0 & 1 \\ 1 & 0 & -1 & 0 \\ -1 & 0 & 0 & 0 \end{pmatrix}$$

.176

$$J = \operatorname{diag}(J_3(7), J_1(7))$$
$$P = \begin{pmatrix} 17 & 21 & 23 & 35 \\ 11 & 14 & 15 & 23 \\ 5 & 6 & 7 & 10 \\ 9 & 11 & 12 & 18 \end{pmatrix}$$

.177

$$J = \operatorname{diag}(J_1(-2), J_1(-2), J_2(-10))$$
$$P = \begin{pmatrix} 4 & 1 & 5 & 5 \\ 9 & 3 & 9 & 10 \\ 12 & 4 & 12 & 13 \\ 1 & 0 & 1 & 1 \end{pmatrix}$$

.178

$$J = \operatorname{diag}(J_1(17), J_1(11), J_1(-4), J_1(-8))$$
$$P = \begin{pmatrix} 4 & 3 & 1 & 7 \\ 3 & 2 & 0 & 3 \\ 1 & 1 & 1 & 3 \\ -1 & -1 & 0 & -1 \end{pmatrix}$$

.179

$$J = \operatorname{diag}(J_2(-18), J_1(-18), J_1(-18))$$
$$P = \begin{pmatrix} 3 & 1 & 3 & 5 \\ -1 & 0 & -1 & -2 \\ -3 & 0 & -2 & -5 \\ 0 & 1 & 1 & -1 \end{pmatrix}$$

.180

$$J = \operatorname{diag}(J_1(12), J_1(12), J_1(-3), J_1(-3))$$
$$P = \begin{pmatrix} -1 & -2 & 1 & -4 \\ 0 & 1 & -2 & 3 \\ 0 & -1 & 1 & -2 \\ -1 & -2 & 1 & -3 \end{pmatrix}$$

.181

$$J = \operatorname{diag}(J_1(0), J_1(0), J_1(-3), J_1(-10))$$
$$P = \begin{pmatrix} 4 & 0 & 2 & 5 \\ 2 & 0 & 1 & 3 \\ 1 & 0 & 1 & 1 \\ 8 & 1 & 4 & 9 \end{pmatrix}$$

.182

$$J = \operatorname{diag}(J_2(19), J_1(19), J_1(8))$$
$$P = \begin{pmatrix} 1 & 2 & 1 & 2 \\ 2 & 5 & 3 & 6 \\ -1 & -3 & 0 & -3 \\ -1 & -3 & -1 & -3 \end{pmatrix}$$

.183

$$J = \operatorname{diag}(J_1(10), J_1(7), J_1(4), J_1(-1))$$
$$P = \begin{pmatrix} 5 & 2 & 6 & 8 \\ -5 & -1 & -6 & -8 \\ 2 & 1 & 2 & 3 \\ 1 & 0 & 1 & 1 \end{pmatrix}$$

.184

$$J = \operatorname{diag}(J_2(-10), J_1(-10), J_1(-10))$$
$$P = \begin{pmatrix} 1 & -1 & 0 & -1 \\ 1 & -4 & 1 & -1 \\ 1 & -2 & 0 & -2 \\ 1 & 0 & -1 & -2 \end{pmatrix}$$

.185

$$J = \operatorname{diag}(J_1(9), J_1(5), J_1(3), J_1(-2))$$
$$P = \begin{pmatrix} 3 & -3 & -1 & 1 \\ -1 & 0 & 0 & -1 \\ 2 & -2 & -1 & 1 \\ -7 & 6 & 2 & -4 \end{pmatrix}$$

.186

$$J = \operatorname{diag}(J_3(11), J_1(11))$$
$$P = \begin{pmatrix} -8 & -10 & -3 & -13 \\ 3 & 4 & 1 & 5 \\ 2 & 3 & 1 & 4 \\ 7 & 9 & 3 & 11 \end{pmatrix}$$

.187

$$J = \operatorname{diag}(J_3(17), J_1(17))$$
$$P = \begin{pmatrix} -2 & 0 & -3 & -3 \\ 23 & 5 & 31 & 34 \\ -9 & -2 & -12 & -13 \\ 10 & 2 & 14 & 15 \end{pmatrix}$$

.188

$$J = \operatorname{diag}(J_2(16), J_1(16), J_1(12))$$
$$P = \begin{pmatrix} -1 & -2 & -2 & -3 \\ 3 & 4 & 5 & 3 \\ 1 & 1 & 1 & 0 \\ -1 & -2 & -2 & -2 \end{pmatrix}$$

.189

$$J = \operatorname{diag}(J_2(-15), J_1(-17), J_1(-18))$$
$$P = \begin{pmatrix} 4 & 14 & 8 & 23 \\ -3 & -11 & -6 & -18 \\ 2 & 6 & 3 & 10 \\ -2 & -7 & -4 & -11 \end{pmatrix}$$

.190

$$J = \operatorname{diag}(J_1(-10), J_1(-10), J_2(-18))$$
$$P = \begin{pmatrix} 2 & 1 & 1 & 3 \\ 4 & 1 & 1 & 6 \\ 0 & 1 & 0 & -1 \\ -3 & -1 & -1 & -5 \end{pmatrix}$$

.191

$$J = \operatorname{diag}(J_3(-10), J_1(-16))$$
$$P = \begin{pmatrix} -2 & 4 & 7 & 0 \\ 1 & -2 & -3 & 0 \\ -3 & 5 & 8 & -1 \\ -2 & 5 & 8 & 0 \end{pmatrix}$$

.192

$$J = \operatorname{diag}(J_2(11), J_1(11), J_1(5))$$
$$P = \begin{pmatrix} -4 & -1 & -1 & -8 \\ 3 & 1 & 1 & 7 \\ 7 & 3 & 2 & 16 \\ -4 & -2 & -1 & -10 \end{pmatrix}$$

.193

$$J = \operatorname{diag}(J_1(13), J_1(13), J_1(-13), J_1(-18))$$
$$P = \begin{pmatrix} 1 & -1 & 1 & -3 \\ 1 & -2 & 1 & -3 \\ -1 & 1 & -1 & 2 \\ -1 & 2 & 0 & 3 \end{pmatrix}$$

.194

$$J = \operatorname{diag}(J_1(5), J_1(0), J_1(-12), J_1(-13))$$
$$P = \begin{pmatrix} 1 & 2 & 0 & 3 \\ 2 & 5 & 1 & 5 \\ -2 & -3 & 0 & -4 \\ 2 & 4 & 0 & 5 \end{pmatrix}$$

.195

$$J = \operatorname{diag}(J_1(10), J_1(8), J_1(4), J_1(-2))$$
$$P = \begin{pmatrix} 0 & 0 & 1 & 0 \\ -2 & -3 & -5 & -3 \\ 1 & 2 & 6 & 3 \\ -2 & -3 & -7 & -4 \end{pmatrix}$$

.196

$$J = \operatorname{diag}(J_1(7), J_1(0), J_1(-9), J_1(-20))$$
$$P = \begin{pmatrix} 1 & 1 & 1 & -3 \\ -1 & -1 & -1 & 2 \\ -3 & -1 & 0 & 6 \\ 2 & 1 & 0 & -5 \end{pmatrix}$$

.197

$$J = \operatorname{diag}(J_1(20), J_1(5), J_1(-11), J_1(-20))$$
$$P = \begin{pmatrix} -1 & 0 & 0 & -1 \\ 1 & 1 & 2 & 0 \\ 1 & 2 & 5 & -1 \\ -1 & 0 & -1 & 0 \end{pmatrix}$$

.198

$$J = \operatorname{diag}(J_3(16), J_1(6))$$
$$P = \begin{pmatrix} -1 & 1 & 0 & -1 \\ 1 & 0 & 1 & 1 \\ -2 & -2 & -3 & -4 \\ 2 & 1 & 2 & 3 \end{pmatrix}$$

.199

$$J = \operatorname{diag}(J_2(-1), J_1(-1), J_1(-1))$$
$$P = \begin{pmatrix} -2 & -2 & -2 & -5 \\ 13 & 15 & 16 & 34 \\ 3 & 3 & 3 & 7 \\ -2 & -3 & -3 & -6 \end{pmatrix}$$

.200

$$J = \operatorname{diag}(J_1(17), J_1(14), J_1(5), J_1(-16))$$
$$P = \begin{pmatrix} 3 & -3 & -9 & 1 \\ 3 & -2 & -6 & 1 \\ -2 & 2 & 7 & -1 \\ 3 & -2 & -7 & 1 \end{pmatrix}$$

.201

$$J = \operatorname{diag}(J_2(10), J_1(2), J_1(-1))$$
$$P = \begin{pmatrix} -1 & -2 & 0 & 0 \\ 1 & 3 & 0 & 0 \\ -2 & -3 & 0 & -1 \\ -2 & 0 & -1 & -3 \end{pmatrix}$$

.202

$$J = \operatorname{diag}(J_1(0), J_1(-4), J_1(-5), J_1(-17))$$
$$P = \begin{pmatrix} -1 & -2 & -2 & -3 \\ 1 & 2 & 2 & 4 \\ 0 & 1 & 1 & 2 \\ -2 & -6 & -7 & -11 \end{pmatrix}$$

.203

$$J = \operatorname{diag}(J_3(0), J_1(-7))$$
$$P = \begin{pmatrix} 0 & 0 & 0 & 1 \\ -1 & -1 & -1 & -1 \\ 1 & 2 & 1 & 1 \\ -1 & -2 & 0 & -2 \end{pmatrix}$$

.204

$$J = \operatorname{diag}(J_1(19), J_1(11), J_1(-8), J_1(-16))$$
$$P = \begin{pmatrix} 0 & 3 & 1 & 2 \\ 0 & -1 & 0 & 0 \\ -1 & 2 & 0 & 0 \\ 1 & -1 & 0 & 1 \end{pmatrix}$$

.205

$$J = \operatorname{diag}(J_1(-5), J_1(-5), J_1(-7), J_1(-15))$$
$$P = \begin{pmatrix} 1 & 0 & 0 & 2 \\ 1 & 1 & 1 & -1 \\ -3 & -1 & -1 & -2 \\ 3 & 0 & 1 & 3 \end{pmatrix}$$

.206

$$J = \operatorname{diag}(J_1(15), J_1(11), J_1(1), J_1(-9))$$
$$P = \begin{pmatrix} 1 & 0 & 0 & 3 \\ 3 & 2 & 1 & 4 \\ -1 & -1 & 0 & -1 \\ 1 & 1 & 0 & 0 \end{pmatrix}$$

.207

$$J = \operatorname{diag}(J_2(3), J_1(3), J_1(3))$$
$$P = \begin{pmatrix} 4 & 21 & 7 & 27 \\ -2 & -9 & -3 & -12 \\ 3 & 14 & 5 & 18 \\ 0 & -1 & 0 & -1 \end{pmatrix}$$

.208

$$J = \operatorname{diag}(J_1(11), J_1(1), J_1(-8), J_1(-19))$$
$$P = \begin{pmatrix} -1 & -1 & -2 & -3 \\ 0 & -1 & 0 & 1 \\ 0 & 1 & 0 & 0 \\ -1 & -1 & -1 & -2 \end{pmatrix}$$

.209

$$J = \operatorname{diag}(J_2(6), J_1(6), J_1(6))$$
$$P = \begin{pmatrix} 3 & 7 & 1 & -2 \\ -4 & -10 & -1 & 3 \\ -3 & -8 & -1 & 3 \\ -1 & -4 & -1 & 2 \end{pmatrix}$$

.210

$$J = \operatorname{diag}(J_1(12), J_1(7), J_1(-1), J_1(-11))$$
$$P = \begin{pmatrix} 0 & 0 & 0 & -1 \\ 1 & 0 & -1 & -2 \\ 4 & -1 & -3 & -4 \\ -2 & 1 & 2 & 3 \end{pmatrix}$$

.211

$$J = \operatorname{diag}(J_3(0), J_1(-5))$$
$$P = \begin{pmatrix} -2 & -6 & -7 & -9 \\ -2 & -7 & -8 & -10 \\ -1 & -3 & -4 & -5 \\ -3 & -9 & -10 & -12 \end{pmatrix}$$

.212

$$J = \operatorname{diag}(J_1(20), J_1(20), J_1(15), J_1(-20))$$
$$P = \begin{pmatrix} 1 & 1 & 2 & 2 \\ 0 & 1 & 0 & 2 \\ 0 & 0 & -1 & 1 \\ 1 & 2 & 2 & 3 \end{pmatrix}$$

.213

$$J = \operatorname{diag}(J_3(-9), J_1(-15))$$
$$P = \begin{pmatrix} 0 & -1 & 0 & -2 \\ 1 & 2 & 1 & 4 \\ -1 & -1 & 0 & -3 \\ 0 & -1 & -1 & 0 \end{pmatrix}$$

.214

$$J = \operatorname{diag}(J_1(13), J_1(13), J_1(9), J_1(-2))$$
$$P = \begin{pmatrix} 0 & 0 & 1 & 0 \\ 2 & 5 & -5 & 4 \\ 1 & 2 & -2 & 2 \\ -1 & -3 & 3 & -3 \end{pmatrix}$$

.215

$$J = \operatorname{diag}(J_2(13), J_1(-6), J_1(-8))$$
$$P = \begin{pmatrix} 0 & 1 & 2 & -1 \\ 0 & -1 & -1 & 1 \\ -2 & -1 & 0 & -2 \\ 1 & 0 & -1 & 1 \end{pmatrix}$$

.216

$$J = \operatorname{diag}(J_1(6), J_1(5), J_1(-4), J_1(-8))$$
$$P = \begin{pmatrix} 0 & 0 & 0 & -1 \\ -2 & -1 & -7 & -11 \\ -1 & 0 & -3 & -3 \\ -1 & 0 & -2 & -1 \end{pmatrix}$$

.217

$$J = \operatorname{diag}(J_3(-20), J_1(-20))$$
$$P = \begin{pmatrix} -3 & -4 & -3 & -5 \\ -1 & -1 & 0 & -2 \\ 1 & 1 & 1 & 2 \\ 2 & 2 & 2 & 3 \end{pmatrix}$$

.218

$$J = \operatorname{diag}(J_3(-10), J_1(-10))$$
$$P = \begin{pmatrix} 0 & 2 & 2 & -1 \\ 2 & 3 & 4 & 2 \\ -3 & -7 & -9 & -2 \\ 0 & -1 & -1 & 0 \end{pmatrix}$$

.219

$$J = \operatorname{diag}(J_2(16), J_1(7), J_1(-8))$$
$$P = \begin{pmatrix} -6 & -8 & -2 & -3 \\ -3 & -4 & -1 & -2 \\ -3 & -3 & -1 & -2 \\ 2 & 3 & 1 & 1 \end{pmatrix}$$

.220

$$J = \operatorname{diag}(J_1(18), J_1(16), J_1(0), J_1(-18))$$
$$P = \begin{pmatrix} -1 & 0 & -1 & 0 \\ -3 & -2 & -2 & -3 \\ -2 & -3 & 0 & -3 \\ -2 & -2 & -1 & -2 \end{pmatrix}$$

.221

$$J = \operatorname{diag}(J_3(20), J_1(-7), J_1(-11))$$
$$P = \begin{pmatrix} 1 & 2 & 5 & 0 & 2 \\ 2 & 6 & 15 & 0 & 5 \\ -1 & -3 & -7 & 0 & -2 \\ -1 & -2 & -5 & -1 & -2 \\ 0 & -1 & -2 & 1 & -1 \end{pmatrix}$$

.222

$$J = \operatorname{diag}(J_1(5), J_1(5), J_1(2), J_1(-12), J_1(-18))$$
$$P = \begin{pmatrix} -2 & -4 & -5 & -12 & -15 \\ -2 & -2 & -3 & -5 & -4 \\ -1 & -2 & -2 & -5 & -6 \\ -2 & -2 & -3 & -6 & -6 \\ 0 & 1 & 1 & 3 & 5 \end{pmatrix}$$

.223

$$J = \operatorname{diag}(J_2(-9), J_1(-12), J_1(-15), J_1(-19))$$
$$P = \begin{pmatrix} 2 & 0 & 2 & 1 & 3 \\ 9 & 3 & 11 & 4 & 10 \\ -9 & -5 & -12 & -3 & -6 \\ 2 & 0 & 2 & 1 & 4 \\ -4 & -3 & -6 & -1 & -1 \end{pmatrix}$$

.224

$$J = \operatorname{diag}(J_3(-10), J_2(-10))$$
$$P = \begin{pmatrix} 1 & 7 & 6 & 5 & 9 \\ -2 & -19 & -16 & -13 & -26 \\ 0 & -5 & -4 & -3 & -7 \\ 1 & 8 & 7 & 6 & 11 \\ 1 & 11 & 9 & 8 & 15 \end{pmatrix}$$

.225

$$J = \operatorname{diag}(J_2(3), J_1(-2), J_1(-6), J_1(-7))$$
$$P = \begin{pmatrix} -1 & 1 & -1 & 1 & -1 \\ 1 & 0 & 2 & 0 & 2 \\ 2 & -1 & 2 & 0 & 1 \\ 3 & -1 & 4 & 0 & 4 \\ -3 & 2 & -4 & 1 & -3 \end{pmatrix}$$

.226

$$J = \operatorname{diag}(J_2(19), J_1(18), J_1(8), J_1(-1))$$
$$P = \begin{pmatrix} 0 & 0 & 0 & -1 & 1 \\ 1 & 1 & 2 & -2 & 2 \\ 1 & 2 & 1 & 4 & 0 \\ -3 & -4 & -4 & -3 & -2 \\ -2 & -3 & -3 & 0 & -3 \end{pmatrix}$$

.227

$$J = \operatorname{diag}(J_4(0), J_1(0))$$
$$P = \begin{pmatrix} -11 & -1 & -19 & -22 & -37 \\ -26 & -2 & -43 & -50 & -85 \\ -10 & -1 & -16 & -19 & -32 \\ 2 & 0 & 3 & 3 & 6 \\ -9 & -1 & -15 & -18 & -30 \end{pmatrix}$$

.228

$$J = \operatorname{diag}(J_4(-1), J_1(-5))$$
$$P = \begin{pmatrix} 5 & 4 & 5 & 16 & 27 \\ 2 & 2 & 2 & 7 & 11 \\ 0 & 0 & 0 & 0 & 1 \\ 1 & 1 & 1 & 3 & 5 \\ 7 & 5 & 6 & 20 & 33 \end{pmatrix}$$

.229

$$J = \operatorname{diag}(J_3(1), J_1(1), J_1(0))$$
$$P = \begin{pmatrix} 0 & 2 & -4 & 0 & -5 \\ 1 & 0 & 6 & 1 & 7 \\ 0 & 0 & 1 & 0 & 1 \\ 1 & 3 & 1 & 1 & 1 \\ -3 & -3 & -12 & -2 & -14 \end{pmatrix}$$

.230

$$J = \operatorname{diag}(J_3(9), J_1(3), J_1(-1))$$
$$P = \begin{pmatrix} 0 & 1 & 1 & 3 & 4 \\ 0 & -1 & -1 & -2 & -2 \\ -1 & 3 & 1 & 3 & 0 \\ -1 & 3 & 1 & 3 & -1 \\ 1 & -2 & -1 & -2 & 0 \end{pmatrix}$$

.231

$$J = \operatorname{diag}(J_1(5), J_1(5), J_1(5), J_1(3), J_1(3))$$
$$P = \begin{pmatrix} 1 & 3 & 1 & 2 & 3 \\ -1 & -8 & -2 & -2 & -10 \\ 0 & 11 & 2 & 1 & 15 \\ 0 & 2 & 0 & 0 & 3 \\ -1 & 7 & 1 & -1 & 10 \end{pmatrix}$$

.232

$$J = \operatorname{diag}(J_1(-4), J_1(-4), J_1(-9), J_1(-9), J_1(-10))$$
$$P = \begin{pmatrix} 0 & -1 & 1 & -1 & -4 \\ 1 & 1 & 1 & 1 & -1 \\ 0 & -1 & 0 & -2 & -5 \\ 0 & 0 & -2 & -1 & 0 \\ 1 & 1 & 0 & 1 & 1 \end{pmatrix}$$

.233

$$J = \operatorname{diag}(J_2(9), J_1(-2), J_1(-13), J_1(-18))$$
$$P = \begin{pmatrix} 0 & -1 & 0 & -1 & -1 \\ 0 & 2 & 0 & 2 & 3 \\ 1 & 2 & 0 & 2 & 2 \\ 0 & 1 & 1 & 1 & 2 \\ -1 & 0 & 0 & -1 & 1 \end{pmatrix}$$

.234

$$J = \operatorname{diag}(J_3(20), J_2(20))$$
$$P = \begin{pmatrix} -3 & 1 & 2 & -1 & 2 \\ -1 & 2 & 1 & 1 & 3 \\ 2 & -1 & -1 & 0 & -2 \\ 0 & -4 & 0 & -3 & -6 \\ 1 & 2 & 0 & 2 & 3 \end{pmatrix}$$

.235

$$J = \operatorname{diag}(J_1(3), J_1(3), J_1(1), J_1(-11), J_1(-17))$$
$$P = \begin{pmatrix} 4 & 3 & 3 & 9 & 3 \\ 1 & 1 & 1 & 2 & 1 \\ -1 & -1 & -1 & -2 & -2 \\ 1 & 2 & 1 & 0 & 4 \\ 1 & 2 & 1 & 1 & 4 \end{pmatrix}$$

.236

$$J = \operatorname{diag}(J_1(7), J_1(7), J_1(0), J_1(0), J_1(-10))$$
$$P = \begin{pmatrix} 4 & 2 & -6 & -1 & -2 \\ 0 & 0 & 1 & 1 & 0 \\ -5 & -3 & 5 & -1 & 3 \\ -3 & -2 & 2 & -1 & 1 \\ 1 & 1 & 0 & 1 & 0 \end{pmatrix}$$

.237

$$J = \operatorname{diag}(J_2(11), J_1(3), J_1(-5), J_1(-16))$$
$$P = \begin{pmatrix} 1 & 0 & -1 & 0 & 3 \\ 0 & -1 & 0 & -2 & -3 \\ 0 & 0 & -2 & -1 & 4 \\ 0 & 0 & 1 & 1 & -1 \\ 0 & 1 & -1 & 1 & 5 \end{pmatrix}$$

.238

$$J = \operatorname{diag}(J_1(14), J_1(14), J_2(6), J_1(-1))$$
$$P = \begin{pmatrix} -1 & -2 & 3 & -3 & 0 \\ 1 & 4 & -2 & 4 & -1 \\ -1 & -2 & 1 & -2 & 0 \\ 1 & 2 & -2 & 3 & 0 \\ 1 & 3 & -2 & 4 & -1 \end{pmatrix}$$

.239

$$J = \operatorname{diag}(J_2(7), J_1(-7), J_1(-10), J_1(-13))$$
$$P = \begin{pmatrix} -1 & 0 & 0 & -2 & -5 \\ 1 & 0 & -1 & 3 & 5 \\ -1 & 0 & 1 & -4 & -6 \\ 1 & -1 & -1 & 1 & 4 \\ 2 & -1 & -2 & 5 & 11 \end{pmatrix}$$

.240

$$J = \operatorname{diag}(J_3(-4), J_1(-4), J_1(-5))$$
$$P = \begin{pmatrix} 12 & 5 & 15 & 17 & 2 \\ 2 & 0 & 4 & 4 & -1 \\ 5 & 3 & 6 & 7 & 2 \\ -6 & -3 & -7 & -8 & -2 \\ -7 & -3 & -9 & -10 & -1 \end{pmatrix}$$

.241

$$J = \operatorname{diag}(J_2(-3), J_1(-3), J_1(-3), J_1(-3))$$
$$P = \begin{pmatrix} 1 & 1 & 0 & 1 & 2 \\ 1 & -1 & 1 & 2 & -1 \\ 0 & -2 & 0 & 1 & -3 \\ 0 & 1 & -1 & -1 & 2 \\ 0 & -2 & 1 & 2 & -3 \end{pmatrix}$$

.242

$$J = \operatorname{diag}(J_3(-13), J_1(-13), J_1(-13))$$
$$P = \begin{pmatrix} -4 & -2 & -6 & -5 & -7 \\ -7 & -2 & -10 & -10 & -15 \\ 12 & 4 & 17 & 16 & 24 \\ 8 & 2 & 11 & 11 & 16 \\ 9 & 3 & 13 & 12 & 18 \end{pmatrix}$$

.243

$$J = \operatorname{diag}(J_1(10), J_1(10), J_1(4), J_1(-1), J_1(-5))$$
$$P = \begin{pmatrix} -1 & 4 & 7 & 3 & 2 \\ 1 & -3 & -6 & -3 & -3 \\ -2 & 7 & 12 & 4 & 1 \\ -2 & 7 & 13 & 6 & 4 \\ 0 & -1 & -2 & -1 & 0 \end{pmatrix}$$

.244

$$J = \operatorname{diag}(J_1(7), J_1(7), J_2(3), J_1(-3))$$
$$P = \begin{pmatrix} 9 & 17 & 12 & 20 & 0 \\ -4 & -8 & -6 & -10 & 1 \\ -2 & -4 & -3 & -5 & 0 \\ 1 & 2 & 1 & 2 & 0 \\ 6 & 11 & 7 & 11 & 3 \end{pmatrix}$$

.245

$$J = \operatorname{diag}(J_4(-13), J_1(-13))$$
$$P = \begin{pmatrix} -26 & -19 & -23 & -32 & -34 \\ -1 & -1 & -1 & -2 & -1 \\ -4 & -3 & -4 & -6 & -5 \\ 12 & 9 & 11 & 15 & 16 \\ -19 & -14 & -17 & -24 & -25 \end{pmatrix}$$

.246

$$J = \operatorname{diag}(J_2(8), J_1(7), J_1(-2), J_1(-11))$$
$$P = \begin{pmatrix} 0 & 0 & 0 & -1 & 0 \\ -3 & -1 & -2 & -4 & -2 \\ 1 & 1 & 1 & 1 & 0 \\ 2 & 0 & 1 & 3 & 3 \\ -1 & 0 & -1 & -2 & 0 \end{pmatrix}$$

.247

$$J = \operatorname{diag}(J_3(9), J_1(9), J_1(9))$$
$$P = \begin{pmatrix} 7 & 13 & 43 & 38 & 47 \\ 3 & 5 & 17 & 15 & 18 \\ -3 & -5 & -17 & -15 & -19 \\ 1 & 2 & 7 & 6 & 8 \\ 5 & 10 & 32 & 28 & 35 \end{pmatrix}$$

.248

$$J = \operatorname{diag}(J_1(-1), J_1(-1), J_2(-4), J_1(-5))$$
$$P = \begin{pmatrix} 11 & 5 & 3 & 5 & 12 \\ 5 & 2 & 1 & 2 & 6 \\ 9 & 4 & 2 & 4 & 10 \\ -4 & -2 & 0 & -1 & -6 \\ 3 & 1 & 1 & 1 & 3 \end{pmatrix}$$

.249

$$J = \operatorname{diag}(J_2(4), J_2(3), J_1(-9))$$
$$P = \begin{pmatrix} -3 & -1 & -6 & -9 & -12 \\ 0 & 0 & -1 & -1 & -1 \\ 3 & 1 & 4 & 6 & 6 \\ 1 & 0 & 1 & 2 & 2 \\ 4 & 1 & 6 & 9 & 10 \end{pmatrix}$$

.250

$$J = \operatorname{diag}(J_1(-7), J_1(-7), J_1(-7), J_1(-10), J_1(-10))$$
$$P = \begin{pmatrix} 1 & 3 & 7 & 4 & 8 \\ -2 & -6 & -16 & -10 & -17 \\ 0 & 1 & 3 & 1 & 4 \\ 1 & 3 & 7 & 5 & 7 \\ 2 & 7 & 18 & 11 & 20 \end{pmatrix}$$

.251

$$J = \operatorname{diag}(J_3(-9), J_1(-9), J_1(-10))$$
$$P = \begin{pmatrix} 0 & -2 & -1 & -1 & 0 \\ 0 & 1 & 0 & -1 & -1 \\ -1 & 0 & 2 & 7 & 4 \\ 1 & 3 & 0 & -3 & -3 \\ 0 & -1 & 0 & 0 & 0 \end{pmatrix}$$

.252

$$J = \operatorname{diag}(J_3(16), J_1(16), J_1(-8))$$
$$P = \begin{pmatrix} -1 & 1 & 3 & -2 & 1 \\ 0 & -1 & -2 & 0 & 0 \\ 2 & -2 & -7 & 5 & -2 \\ -2 & 1 & 4 & -3 & 1 \\ -1 & 1 & 2 & -1 & 0 \end{pmatrix}$$

.253

$$J = \operatorname{diag}(J_3(11), J_2(2))$$
$$P = \begin{pmatrix} 0 & 4 & 4 & 2 & 7 \\ 0 & 5 & 5 & 2 & 8 \\ 1 & -1 & 1 & 0 & 1 \\ -1 & 0 & -1 & -1 & -2 \\ 0 & 3 & 3 & 1 & 5 \end{pmatrix}$$

.254

$$J = \operatorname{diag}(J_1(17), J_1(17), J_1(10), J_1(6), J_1(-1))$$

$$P = \begin{pmatrix} -2 & -4 & -4 & 0 & -3 \\ 1 & 1 & 0 & 1 & 2 \\ -1 & 1 & 2 & 0 & -1 \\ 1 & 3 & 3 & 1 & 2 \\ 2 & 3 & 3 & 0 & 3 \end{pmatrix}$$

.255

$$J = \operatorname{diag}(J_2(-2), J_1(-2), J_1(-8), J_1(-10))$$

$$P = \begin{pmatrix} 1 & 2 & 2 & 3 & 4 \\ 2 & 6 & 5 & 9 & 13 \\ 0 & 1 & 0 & 1 & 0 \\ 1 & 5 & 4 & 7 & 11 \\ 1 & 4 & 3 & 6 & 8 \end{pmatrix}$$

.256

$$J = \operatorname{diag}(J_5(-13))$$

$$P = \begin{pmatrix} 3 & 1 & 0 & 2 & 4 \\ -7 & -1 & 0 & -3 & -10 \\ -11 & -3 & -1 & -7 & -15 \\ -2 & 0 & 0 & 0 & -3 \\ 22 & 5 & 1 & 12 & 31 \end{pmatrix}$$

.257

$$J = \operatorname{diag}(J_2(14), J_1(12), J_1(-2), J_1(-3))$$

$$P = \begin{pmatrix} 0 & 0 & 0 & 0 & 1 \\ -2 & -1 & -5 & -1 & -7 \\ 3 & 2 & 6 & 1 & 9 \\ 1 & 1 & 2 & 1 & 1 \\ -2 & -1 & -4 & -1 & -6 \end{pmatrix}$$

.258

$$J = \operatorname{diag}(J_3(8), J_2(7))$$

$$P = \begin{pmatrix} 10 & 12 & 6 & 7 & 17 \\ -16 & -18 & -9 & -11 & -26 \\ -5 & -6 & -3 & -3 & -9 \\ 13 & 15 & 8 & 9 & 22 \\ -10 & -11 & -6 & -7 & -16 \end{pmatrix}$$

.259

$$J = \operatorname{diag}(J_1(20), J_1(20), J_1(12), J_1(1), J_1(-9))$$
$$P = \begin{pmatrix} -2 & -1 & -6 & -3 & -5 \\ 1 & -1 & -2 & -3 & -6 \\ 1 & 2 & 7 & 5 & 9 \\ 1 & 0 & 2 & 0 & 0 \\ 2 & 0 & 3 & 0 & 0 \end{pmatrix}$$

.260

$$J = \operatorname{diag}(J_1(7), J_1(7), J_1(3), J_1(-2), J_1(-18))$$
$$P = \begin{pmatrix} 1 & 2 & -3 & 3 & 1 \\ 0 & 0 & -1 & 1 & -1 \\ 0 & 1 & 3 & 0 & 0 \\ -1 & -3 & 2 & -4 & -1 \\ 0 & 1 & -1 & 2 & -1 \end{pmatrix}$$

.261

$$J = \operatorname{diag}(J_2(19), J_1(14), J_1(12), J_1(10))$$
$$P = \begin{pmatrix} 0 & 1 & 0 & 1 & 1 \\ 1 & 1 & 1 & 2 & 2 \\ -6 & -9 & -5 & -10 & -12 \\ -4 & -5 & -3 & -6 & -7 \\ 1 & 1 & 1 & 1 & 1 \end{pmatrix}$$

.262

$$J = \operatorname{diag}(J_3(-1), J_1(-3), J_1(-3))$$
$$P = \begin{pmatrix} -3 & -5 & -1 & -10 & -16 \\ 4 & 8 & 1 & 15 & 24 \\ 6 & 9 & 1 & 18 & 29 \\ 1 & 1 & 0 & 2 & 3 \\ 2 & 2 & 0 & 4 & 7 \end{pmatrix}$$

.263

$$J = \operatorname{diag}(J_2(14), J_1(14), J_1(7), J_1(1))$$
$$P = \begin{pmatrix} 0 & -1 & 0 & 0 & 1 \\ 3 & 4 & 3 & -2 & -5 \\ -2 & -3 & -2 & 2 & 4 \\ -1 & -2 & -2 & 1 & 2 \\ 3 & 4 & 4 & -2 & -4 \end{pmatrix}$$

.264

$$J = \operatorname{diag}(J_1(1), J_1(1), J_1(-3), J_1(-10), J_1(-15))$$
$$P = \begin{pmatrix} 8 & -7 & 20 & 2 & 5 \\ -14 & 12 & -35 & -3 & -8 \\ 0 & 0 & 1 & 0 & 0 \\ -1 & 1 & -3 & 0 & -1 \\ 2 & -2 & 6 & 0 & 1 \end{pmatrix}$$

.265

$$J = \operatorname{diag}(J_2(11), J_1(-5), J_1(-10), J_1(-17))$$
$$P = \begin{pmatrix} 1 & 1 & 2 & 1 & 4 \\ 1 & -2 & -7 & 0 & -15 \\ 2 & -1 & -4 & 1 & -9 \\ 1 & 0 & -1 & 1 & -3 \\ -1 & 0 & 0 & -1 & 0 \end{pmatrix}$$

.266

$$J = \operatorname{diag}(J_1(-2), J_1(-2), J_1(-2), J_1(-4), J_1(-4))$$
$$P = \begin{pmatrix} -12 & -9 & -9 & -5 & -17 \\ 14 & 11 & 10 & 6 & 20 \\ -10 & -8 & -7 & -4 & -15 \\ -16 & -13 & -11 & -7 & -24 \\ -7 & -6 & -5 & -3 & -11 \end{pmatrix}$$

.267

$$J = \operatorname{diag}(J_3(13), J_1(0), J_1(-4))$$
$$P = \begin{pmatrix} 3 & 3 & 0 & 1 & 3 \\ 0 & -2 & -2 & -3 & -5 \\ 0 & -1 & 0 & 0 & 0 \\ -1 & 0 & 1 & 1 & 1 \\ 3 & 3 & -1 & 0 & 1 \end{pmatrix}$$

.268

$$J = \operatorname{diag}(J_1(1), J_1(1), J_1(-2), J_1(-2), J_1(-4))$$
$$P = \begin{pmatrix} 1 & 5 & 1 & 2 & 7 \\ 0 & -2 & 0 & -1 & -3 \\ -5 & -14 & -2 & -4 & -17 \\ 4 & 14 & 2 & 5 & 18 \\ -2 & -8 & -1 & -3 & -11 \end{pmatrix}$$

.269

$$J = \operatorname{diag}(J_1(20), J_1(20), J_1(8), J_1(8), J_1(5))$$
$$P = \begin{pmatrix} -1 & 1 & -5 & -5 & -2 \\ 0 & -1 & 3 & 5 & 1 \\ 0 & 0 & 0 & 0 & 1 \\ 1 & 0 & 2 & 1 & 1 \\ 0 & 0 & -1 & -1 & -1 \end{pmatrix}$$

.270

$$J = \operatorname{diag}(J_1(19), J_1(19), J_1(13), J_1(7), J_1(-4))$$
$$P = \begin{pmatrix} -1 & -1 & -2 & -1 & 0 \\ 3 & 1 & 6 & 4 & 2 \\ 4 & 2 & 8 & 5 & 1 \\ 1 & 0 & 2 & 1 & 1 \\ -1 & 0 & -1 & -1 & -1 \end{pmatrix}$$

.271

$$J = \operatorname{diag}(J_1(10), J_1(10), J_1(10), J_2(9))$$
$$P = \begin{pmatrix} 1 & -5 & -3 & -21 & -37 \\ 0 & 1 & 1 & 5 & 8 \\ -1 & 2 & 1 & 9 & 17 \\ 0 & -1 & -1 & -5 & -9 \\ 0 & -3 & -2 & -13 & -22 \end{pmatrix}$$

.272

$$J = \operatorname{diag}(J_1(18), J_1(18), J_1(12), J_1(8), J_1(6))$$
$$P = \begin{pmatrix} -1 & 1 & 1 & 6 & 9 \\ 0 & -1 & 0 & -2 & -2 \\ -1 & 2 & 1 & 8 & 10 \\ 1 & -4 & -2 & -15 & -21 \\ 0 & 0 & 0 & 1 & 2 \end{pmatrix}$$

.273

$$J = \operatorname{diag}(J_3(18), J_1(18), J_1(0))$$
$$P = \begin{pmatrix} -4 & -8 & -5 & -9 & -2 \\ -3 & -6 & -4 & -6 & 0 \\ 1 & 2 & 2 & 2 & -1 \\ 1 & 2 & 1 & 2 & 1 \\ 1 & 1 & 1 & 2 & 1 \end{pmatrix}$$

.274

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(-3), J_1(-5))$$
$$P = \begin{pmatrix} -1 & -1 & -2 & -1 & 0 \\ -1 & -1 & -2 & -1 & -1 \\ 1 & 1 & 1 & 1 & 0 \\ -1 & -2 & -3 & -2 & 0 \\ -3 & -5 & -6 & -4 & -1 \end{pmatrix}$$

.275

$$J = \operatorname{diag}(J_1(7), J_1(7), J_1(6), J_1(3), J_1(2))$$
$$P = \begin{pmatrix} 4 & 5 & 0 & 1 & 0 \\ 4 & 2 & 0 & 3 & 3 \\ -18 & -20 & 1 & -7 & -3 \\ -21 & -22 & 1 & -9 & -5 \\ 3 & 4 & 0 & 1 & 0 \end{pmatrix}$$

.276

$$J = \operatorname{diag}(J_1(18), J_1(18), J_1(18), J_1(18), J_1(13))$$
$$P = \begin{pmatrix} -7 & -5 & -2 & -2 & -8 \\ 1 & 1 & 0 & 1 & 1 \\ -6 & -4 & -1 & -3 & -6 \\ 4 & 3 & 1 & 1 & 5 \\ -13 & -9 & -3 & -4 & -14 \end{pmatrix}$$

.277

$$J = \operatorname{diag}(J_4(16), J_1(16))$$
$$P = \begin{pmatrix} 21 & 9 & 24 & 32 & 40 \\ 13 & 5 & 14 & 19 & 24 \\ -11 & -5 & -13 & -17 & -21 \\ 8 & 3 & 9 & 12 & 15 \\ -38 & -16 & -43 & -57 & -72 \end{pmatrix}$$

.278

$$J = \operatorname{diag}(J_4(13), J_1(2))$$
$$P = \begin{pmatrix} -5 & 2 & 1 & 2 & -5 \\ 2 & -4 & -1 & -6 & 1 \\ -4 & -1 & 0 & -3 & -5 \\ -1 & 0 & 0 & 0 & -1 \\ 8 & -2 & -1 & -1 & 9 \end{pmatrix}$$

.279

$$J = \operatorname{diag}(J_4(-3), J_1(-3))$$
$$P = \begin{pmatrix} -13 & -9 & -4 & -11 & -14 \\ 17 & 12 & 6 & 15 & 19 \\ 16 & 11 & 5 & 14 & 18 \\ 18 & 12 & 6 & 16 & 21 \\ 26 & 18 & 9 & 23 & 29 \end{pmatrix}$$

.280

$$J = \operatorname{diag}(J_1(16), J_1(16), J_1(14), J_1(2), J_1(-13))$$
$$P = \begin{pmatrix} 0 & -1 & -1 & -2 & 0 \\ -2 & 0 & 1 & 2 & -3 \\ -2 & 0 & 0 & 1 & -1 \\ 1 & 0 & -1 & -2 & 2 \\ 0 & 1 & 1 & 2 & 1 \end{pmatrix}$$

.281

$$J = \operatorname{diag}(J_2(-7), J_2(-14), J_1(-15))$$
$$P = \begin{pmatrix} 0 & 0 & 0 & 0 & 1 \\ 2 & 4 & 4 & 5 & 10 \\ 0 & 2 & 1 & 2 & 1 \\ -1 & -1 & -1 & -2 & -2 \\ 2 & 3 & 3 & 4 & 8 \end{pmatrix}$$

.282

$$J = \operatorname{diag}(J_2(19), J_1(5), J_1(3), J_1(-17))$$
$$P = \begin{pmatrix} 2 & 0 & 2 & 0 & 3 \\ 1 & -3 & 6 & 2 & 1 \\ -1 & 0 & -2 & 0 & -2 \\ 0 & -2 & 3 & 1 & 0 \\ 1 & 0 & 1 & 0 & 1 \end{pmatrix}$$

.283

$$J = \operatorname{diag}(J_3(0), J_1(0), J_1(-2))$$
$$P = \begin{pmatrix} 1 & 6 & 7 & 4 & 10 \\ 3 & 11 & 14 & 9 & 18 \\ -1 & -4 & -5 & -3 & -7 \\ 1 & 3 & 4 & 3 & 5 \\ -5 & -12 & -16 & -12 & -19 \end{pmatrix}$$

.284

$$J = \operatorname{diag}(J_3(-3), J_1(-4), J_1(-19))$$
$$P = \begin{pmatrix} 0 & -1 & -1 & -1 & -2 \\ 1 & 1 & 2 & 1 & 1 \\ 1 & 1 & 2 & 2 & 1 \\ 0 & 0 & -1 & 0 & -1 \\ 3 & 1 & 5 & 2 & 1 \end{pmatrix}$$

.285

$$J = \operatorname{diag}(J_2(8), J_1(8), J_1(8), J_1(8))$$
$$P = \begin{pmatrix} 42 & 62 & 8 & 56 & 81 \\ -20 & -30 & -4 & -27 & -39 \\ 48 & 71 & 9 & 64 & 93 \\ 33 & 49 & 6 & 44 & 64 \\ 37 & 55 & 7 & 50 & 72 \end{pmatrix}$$

.286

$$J = \operatorname{diag}(J_2(2), J_1(2), J_1(-14), J_1(-14))$$
$$P = \begin{pmatrix} 0 & 1 & 0 & -1 & 1 \\ 0 & -1 & -1 & -1 & -2 \\ 0 & 0 & 0 & -1 & 0 \\ 0 & 3 & 1 & 0 & 3 \\ 1 & 3 & 1 & 3 & 3 \end{pmatrix}$$

.287

$$J = \operatorname{diag}(J_1(16), J_1(16), J_1(15), J_1(-3), J_1(-9))$$
$$P = \begin{pmatrix} -1 & -1 & -2 & -3 & -6 \\ 2 & 1 & 3 & 3 & 5 \\ 1 & 0 & 2 & 1 & 3 \\ 1 & 1 & 2 & 2 & 4 \\ 0 & 0 & 0 & 0 & 1 \end{pmatrix}$$

.288

$$J = \operatorname{diag}(J_1(17), J_1(17), J_1(-1), J_1(-5), J_1(-20))$$
$$P = \begin{pmatrix} -2 & -1 & -2 & -2 & -3 \\ -1 & -1 & -1 & -1 & -1 \\ 0 & -2 & -1 & -2 & 1 \\ -4 & -2 & -4 & -3 & -5 \\ -3 & -1 & -3 & -2 & -5 \end{pmatrix}$$

.289

$$J = \operatorname{diag}(J_3(11), J_1(-14), J_1(-18))$$
$$P = \begin{pmatrix} 4 & 2 & 10 & -3 & -4 \\ -7 & -3 & -18 & 3 & 4 \\ 1 & 0 & 2 & 0 & 0 \\ -2 & -1 & -5 & 1 & 1 \\ 0 & 0 & 0 & 1 & 1 \end{pmatrix}$$

.290

$$J = \operatorname{diag}(J_1(-1), J_1(-1), J_1(-1), J_1(-9), J_1(-9))$$
$$P = \begin{pmatrix} 2 & 3 & 3 & 4 & 0 \\ 1 & 1 & 1 & 2 & 0 \\ 5 & 7 & 8 & 11 & 0 \\ 1 & 1 & 2 & 2 & 1 \\ 0 & 0 & 0 & 0 & 1 \end{pmatrix}$$

.291

$$J = \operatorname{diag}(J_2(2), J_1(-7), J_1(-8), J_1(-20))$$
$$P = \begin{pmatrix} 2 & 1 & 1 & -1 & -1 \\ 1 & 1 & 1 & -1 & 0 \\ 4 & 2 & 1 & -4 & -1 \\ -4 & -2 & -1 & 4 & 0 \\ -1 & -1 & -1 & 0 & 0 \end{pmatrix}$$

.292

$$J = \operatorname{diag}(J_1(3), J_1(3), J_1(-2), J_1(-5), J_1(-6))$$
$$P = \begin{pmatrix} 3 & 2 & 1 & 4 & 3 \\ 1 & 0 & 0 & 0 & 2 \\ -3 & 0 & 0 & -1 & -5 \\ 2 & 1 & 1 & 3 & 2 \\ -2 & -2 & -1 & -3 & -1 \end{pmatrix}$$

.293

$$J = \operatorname{diag}(J_4(7), J_1(-10))$$
$$P = \begin{pmatrix} 2 & 1 & 3 & 2 & 3 \\ 3 & 1 & 4 & 3 & 5 \\ 1 & 0 & 1 & 1 & 1 \\ -5 & -1 & -7 & -3 & -8 \\ 3 & 1 & 4 & 2 & 4 \end{pmatrix}$$

.294

$$J = \operatorname{diag}(J_3(16), J_1(16), J_1(10))$$
$$P = \begin{pmatrix} -9 & -5 & -12 & -1 & -22 \\ -4 & -2 & -5 & 0 & -8 \\ 0 & 0 & 0 & 0 & 1 \\ -1 & -1 & -2 & 0 & -3 \\ -7 & -4 & -10 & -1 & -18 \end{pmatrix}$$

.295

$$J = \operatorname{diag}(J_2(18), J_1(18), J_2(-14))$$
$$P = \begin{pmatrix} 0 & 1 & 1 & 1 & 0 \\ 1 & 0 & 0 & 1 & 2 \\ -2 & 0 & 0 & -2 & -3 \\ 2 & 0 & -1 & 0 & 3 \\ -2 & -1 & 0 & 0 & -3 \end{pmatrix}$$

.296

$$J = \operatorname{diag}(J_2(13), J_1(13), J_1(12), J_1(12))$$
$$P = \begin{pmatrix} 5 & -1 & 7 & 7 & 7 \\ -6 & 1 & -8 & -8 & -8 \\ -14 & 3 & -16 & -17 & -15 \\ -10 & 2 & -11 & -12 & -10 \\ 6 & -1 & 7 & 8 & 7 \end{pmatrix}$$

.297

$$J = \operatorname{diag}(J_1(15), J_1(15), J_2(13), J_1(8))$$
$$P = \begin{pmatrix} 1 & 9 & 3 & 3 & 14 \\ 0 & -4 & -1 & -1 & -6 \\ 0 & 2 & 0 & 0 & 3 \\ 0 & 2 & 0 & -1 & 4 \\ 0 & 5 & 1 & 1 & 8 \end{pmatrix}$$

.298

$$J = \operatorname{diag}(J_3(-15), J_1(-15), J_1(-20))$$
$$P = \begin{pmatrix} -5 & -2 & -1 & -5 & -5 \\ -1 & -1 & 0 & -1 & -2 \\ 12 & 5 & 2 & 11 & 13 \\ -8 & -3 & -1 & -7 & -9 \\ -10 & -4 & -2 & -9 & -11 \end{pmatrix}$$

.299

$$J = \operatorname{diag}(J_1(6), J_1(6), J_1(4), J_1(-14), J_1(-16))$$
$$P = \begin{pmatrix} -1 & -1 & 2 & 14 & -3 \\ 0 & 0 & 0 & -1 & 0 \\ 3 & 2 & -4 & -36 & 9 \\ 1 & 0 & -1 & -11 & 3 \\ -2 & -1 & 3 & 28 & -7 \end{pmatrix}$$

.300

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(-7), J_1(-20))$$
$$P = \begin{pmatrix} 0 & -3 & -2 & -3 & -5 \\ -1 & 0 & -2 & -3 & 0 \\ 0 & -3 & -3 & -4 & -5 \\ 2 & 0 & 3 & 5 & 1 \\ 1 & -1 & 1 & 2 & -1 \end{pmatrix}$$

.301

$$J = \operatorname{diag}(J_3(15), J_1(14), J_1(9))$$
$$P = \begin{pmatrix} 1 & -5 & -4 & -5 & -8 \\ 0 & 8 & 9 & 10 & 13 \\ -1 & 0 & -1 & -1 & 0 \\ -2 & -4 & -7 & -7 & -7 \\ 1 & -1 & 0 & 0 & -1 \end{pmatrix}$$

.302

$$J = \operatorname{diag}(J_2(-16), J_1(-16), J_2(-20))$$
$$P = \begin{pmatrix} -4 & -2 & -7 & -16 & -17 \\ -6 & -3 & -10 & -25 & -26 \\ -6 & -3 & -9 & -23 & -24 \\ -1 & 0 & -1 & -3 & -3 \\ -1 & 0 & 0 & -2 & -2 \end{pmatrix}$$

.303

$$J = \operatorname{diag}(J_2(20), J_1(13), J_1(12), J_1(-7))$$
$$P = \begin{pmatrix} 0 & 0 & 0 & -1 & 0 \\ 1 & 2 & 3 & 2 & 3 \\ -3 & -5 & -6 & -6 & -6 \\ 3 & 5 & 6 & 6 & 7 \\ -2 & -4 & -5 & -4 & -6 \end{pmatrix}$$

.304

$$J = \operatorname{diag}(J_3(-7), J_1(-7), J_1(-9))$$
$$P = \begin{pmatrix} -1 & -1 & 0 & 0 & -4 \\ 5 & 5 & 1 & 2 & 15 \\ -1 & 0 & 1 & 1 & -4 \\ -3 & -3 & 0 & -1 & -9 \\ 1 & 0 & -1 & -1 & 5 \end{pmatrix}$$

.305

$$J = \operatorname{diag}(J_2(16), J_1(16), J_1(11), J_1(5))$$
$$P = \begin{pmatrix} -2 & -3 & 0 & 0 & -4 \\ 0 & 0 & 0 & 1 & -1 \\ -1 & -1 & 0 & 0 & -1 \\ 4 & 6 & 0 & -1 & 8 \\ 2 & 3 & -1 & 0 & 4 \end{pmatrix}$$

.306

$$J = \operatorname{diag}(J_5(17))$$
$$P = \begin{pmatrix} -8 & -2 & -4 & -13 & 2 \\ -9 & -2 & -4 & -13 & 1 \\ 0 & 0 & 0 & 1 & -1 \\ -5 & -1 & -2 & -6 & -1 \\ 6 & 2 & 3 & 10 & -1 \end{pmatrix}$$

.307

$$J = \operatorname{diag}(J_2(5), J_1(4), J_1(-9), J_1(-12))$$
$$P = \begin{pmatrix} -1 & -6 & 2 & -1 & 3 \\ 1 & 2 & 0 & 0 & 1 \\ 1 & 4 & 0 & 1 & 0 \\ 0 & 3 & -2 & 0 & -3 \\ 1 & 1 & 1 & 0 & 2 \end{pmatrix}$$

.308

$$J = \operatorname{diag}(J_1(20), J_1(20), J_1(13), J_1(-7), J_1(-13))$$
$$P = \begin{pmatrix} 1 & 0 & 2 & 6 & -1 \\ 2 & 1 & 3 & 9 & -1 \\ -2 & -1 & -3 & -8 & 1 \\ -1 & -1 & 0 & -1 & 0 \\ 1 & 1 & 0 & 2 & -1 \end{pmatrix}$$

.309

$$J = \operatorname{diag}(J_2(10), J_1(10), J_2(9))$$
$$P = \begin{pmatrix} 12 & 10 & 9 & 7 & 14 \\ 1 & 2 & 1 & 0 & 3 \\ 3 & 3 & 2 & 1 & 4 \\ 9 & 8 & 7 & 5 & 11 \\ -7 & -5 & -5 & -4 & -7 \end{pmatrix}$$

.310

$$J = \operatorname{diag}(J_2(12), J_1(-6), J_1(-6), J_1(-18))$$
$$P = \begin{pmatrix} -1 & 0 & 0 & -1 & 0 \\ 2 & 0 & -2 & 4 & -1 \\ -1 & -1 & 0 & -3 & -2 \\ 1 & 1 & 1 & 1 & 2 \\ -2 & -1 & 1 & -5 & -1 \end{pmatrix}$$

.311

$$J = \operatorname{diag}(J_1(8), J_1(8), J_1(-11), J_1(-14), J_1(-16))$$
$$P = \begin{pmatrix} 0 & 1 & 0 & 1 & 0 \\ 1 & 3 & 2 & 5 & 1 \\ 0 & 2 & 1 & 1 & 2 \\ -1 & -3 & -2 & -6 & 0 \\ -1 & -3 & -2 & -4 & -1 \end{pmatrix}$$

.312

$$J = \operatorname{diag}(J_2(11), J_2(11), J_1(11))$$
$$P = \begin{pmatrix} -3 & -3 & -8 & -4 & -11 \\ -7 & -7 & -19 & -10 & -27 \\ -6 & -5 & -16 & -8 & -23 \\ -8 & -8 & -21 & -11 & -30 \\ 8 & 8 & 22 & 11 & 31 \end{pmatrix}$$

.313

$$J = \operatorname{diag}(J_1(-8), J_1(-8), J_2(-15), J_1(-19))$$
$$P = \begin{pmatrix} 0 & 1 & -2 & -2 & 2 \\ 3 & 4 & 3 & 4 & 3 \\ -3 & -3 & -6 & -7 & 0 \\ -1 & 0 & -4 & -4 & 2 \\ 1 & 0 & 6 & 6 & -3 \end{pmatrix}$$

.314

$$J = \operatorname{diag}(J_3(7), J_1(-3), J_1(-3))$$
$$P = \begin{pmatrix} -2 & -2 & -2 & 9 & -1 \\ -1 & -1 & -2 & 12 & 1 \\ 0 & 0 & 0 & -1 & 0 \\ -3 & -4 & -2 & 5 & -4 \\ 2 & 3 & 1 & 1 & 4 \end{pmatrix}$$

.315

$$J = \operatorname{diag}(J_2(3), J_1(3), J_1(1), J_1(-7))$$
$$P = \begin{pmatrix} 1 & 7 & 5 & 4 & 7 \\ -1 & -8 & -6 & -5 & -7 \\ 0 & -3 & -2 & -1 & -4 \\ 0 & -5 & -4 & -3 & -5 \\ 1 & 3 & 2 & 1 & 4 \end{pmatrix}$$

.316

$$J = \operatorname{diag}(J_1(20), J_1(20), J_2(19), J_1(2))$$
$$P = \begin{pmatrix} -1 & -2 & -1 & -2 & -1 \\ -1 & -8 & -3 & -5 & -10 \\ -1 & -5 & -2 & -3 & -7 \\ -1 & -6 & -2 & -4 & -7 \\ 1 & 5 & 2 & 4 & 5 \end{pmatrix}$$

.317

$$J = \operatorname{diag}(J_2(5), J_1(-3), J_1(-8), J_1(-9))$$
$$P = \begin{pmatrix} 0 & 1 & 2 & 2 & 0 \\ 1 & 0 & 0 & 1 & 2 \\ 1 & 3 & 3 & 6 & 3 \\ 0 & 0 & 0 & 1 & 1 \\ -1 & 2 & 3 & 3 & -1 \end{pmatrix}$$

.318

$$J = \operatorname{diag}(J_4(13), J_1(13))$$
$$P = \begin{pmatrix} -2 & -3 & -2 & -2 & -3 \\ 11 & 16 & 11 & 11 & 18 \\ 1 & 2 & 1 & 2 & 3 \\ -17 & -25 & -16 & -18 & -29 \\ -12 & -18 & -11 & -13 & -21 \end{pmatrix}$$

.319

$$J = \operatorname{diag}(J_2(10), J_1(-8), J_1(-9), J_1(-17))$$

$$P = \begin{pmatrix} 0 & 2 & 1 & -2 & 4 \\ 0 & -2 & -1 & 1 & -3 \\ 1 & 0 & 0 & 4 & -1 \\ 0 & -1 & -1 & 1 & -2 \\ 1 & -1 & 0 & 3 & -2 \end{pmatrix}$$

.320

$$J = \operatorname{diag}(J_2(16), J_1(13), J_1(0), J_1(-20))$$

$$P = \begin{pmatrix} 0 & 0 & 1 & 0 & 0 \\ -1 & -1 & -1 & -1 & -2 \\ 0 & -1 & 2 & 1 & 2 \\ -1 & -1 & -3 & -1 & -3 \\ -1 & 0 & -3 & -1 & -3 \end{pmatrix}$$

.321

$$J = \operatorname{diag}(J_3(4), J_1(4), J_1(3), J_1(3))$$

$$P = \begin{pmatrix} -5 & -6 & -9 & -9 & -1 & -1 \\ 0 & 2 & 1 & 1 & 0 & -1 \\ -6 & -5 & -10 & -10 & -1 & -2 \\ 5 & 5 & 9 & 9 & 1 & 2 \\ 2 & 2 & 3 & 3 & 0 & 0 \\ 0 & -1 & 1 & 0 & 1 & 3 \end{pmatrix}$$

.322

$$J = \operatorname{diag}(J_3(8), J_1(7), J_1(7), J_1(6))$$

$$P = \begin{pmatrix} -26 & -17 & -23 & -35 & -28 & -36 \\ -2 & -1 & -2 & -3 & -2 & -2 \\ 3 & 2 & 3 & 5 & 4 & 3 \\ -15 & -10 & -13 & -20 & -16 & -22 \\ 17 & 11 & 15 & 23 & 18 & 23 \\ -4 & -3 & -4 & -6 & -5 & -5 \end{pmatrix}$$

.323

$$J = \operatorname{diag}(J_2(1), J_2(0), J_1(-1), J_1(-4))$$

$$P = \begin{pmatrix} 5 & 3 & 11 & 4 & 4 & 14 \\ -6 & -4 & -13 & -5 & -5 & -16 \\ -4 & -3 & -9 & -4 & -4 & -9 \\ -4 & -2 & -9 & -3 & -2 & -13 \\ 1 & 0 & 2 & 1 & 0 & 3 \\ -3 & -2 & -7 & -3 & -3 & -8 \end{pmatrix}$$

.324

$$J = \operatorname{diag}(J_2(17), J_1(17), J_1(17), J_1(13), J_1(9))$$

$$P = \begin{pmatrix} -5 & -4 & -9 & -12 & 1 & -21 \\ 0 & 0 & 0 & 0 & 0 & -1 \\ 0 & 0 & 1 & 2 & -2 & 5 \\ 0 & 0 & -2 & -3 & 3 & -9 \\ -1 & -1 & -2 & -3 & 1 & -6 \\ 3 & 2 & 4 & 5 & 1 & 8 \end{pmatrix}$$

.325

$$J = \operatorname{diag}(J_1(18), J_1(18), J_1(18), J_1(16), J_1(9), J_1(4))$$

$$P = \begin{pmatrix} 1 & 1 & 1 & 3 & 3 & 2 \\ -4 & -3 & -3 & -11 & -6 & -6 \\ 1 & 1 & 2 & 5 & 6 & 4 \\ 2 & 1 & 1 & 4 & 0 & 1 \\ 4 & 3 & 3 & 10 & 5 & 5 \\ 0 & 0 & 0 & 1 & 2 & 2 \end{pmatrix}$$

.326

$$J = \operatorname{diag}(J_1(20), J_1(20), J_2(14), J_1(8), J_1(-5))$$

$$P = \begin{pmatrix} 5 & 1 & -1 & 8 & 13 & 4 \\ -4 & -1 & 1 & -6 & -11 & -5 \\ 2 & 1 & 0 & 3 & 4 & 1 \\ 5 & 2 & -1 & 6 & 11 & 6 \\ -1 & -1 & 0 & 0 & -1 & -3 \\ 6 & 2 & -1 & 9 & 14 & 5 \end{pmatrix}$$

.327

$$J = \operatorname{diag}(J_2(18), J_2(5), J_1(-1), J_1(-8))$$

$$P = \begin{pmatrix} 2 & -2 & -1 & -3 & 0 & -6 \\ -3 & 1 & 0 & 3 & 0 & 3 \\ 3 & -2 & -1 & -4 & 0 & -6 \\ 3 & -2 & -1 & -4 & -1 & -5 \\ -3 & 2 & 1 & 4 & 1 & 4 \\ 4 & -1 & 0 & -3 & 0 & -3 \end{pmatrix}$$

.328

$$J = \operatorname{diag}(J_2(-3), J_1(-3), J_1(-8), J_1(-8), J_1(-9))$$

$$P = \begin{pmatrix} -2 & -4 & -11 & -6 & -11 & -7 \\ 2 & 4 & 12 & 6 & 12 & 7 \\ 2 & 5 & 11 & 8 & 10 & 11 \\ -1 & -2 & -3 & -3 & -2 & -5 \\ 2 & 4 & 9 & 7 & 8 & 10 \\ -1 & -2 & -5 & -3 & -5 & -4 \end{pmatrix}$$

.329

$$J = \operatorname{diag}(J_3(7), J_2(7), J_1(7))$$

$$P = \begin{pmatrix} 4 & 4 & 6 & 3 & 8 & 4 \\ 3 & 3 & 4 & 2 & 6 & 4 \\ 0 & 0 & -1 & 0 & -1 & 2 \\ 4 & 5 & 2 & 2 & 5 & 13 \\ 5 & 5 & 6 & 3 & 9 & 7 \\ -4 & -5 & -2 & -2 & -5 & -14 \end{pmatrix}$$

.330

$$J = \operatorname{diag}(J_2(5), J_2(1), J_1(-1), J_1(-13))$$

$$P = \begin{pmatrix} 0 & -2 & -3 & 13 & 5 & 1 \\ -1 & 0 & -1 & -4 & -2 & -3 \\ 1 & 1 & 3 & -4 & -1 & 2 \\ 0 & -2 & -5 & 17 & 7 & 0 \\ 0 & -1 & -3 & 10 & 4 & 0 \\ -1 & 0 & -2 & -4 & -2 & -4 \end{pmatrix}$$

.331

$$J = \operatorname{diag}(J_3(-2), J_2(-2), J_1(-2))$$

$$P = \begin{pmatrix} 3 & 16 & 7 & 13 & 12 & 19 \\ -5 & -34 & -16 & -30 & -25 & -42 \\ 1 & 13 & 7 & 14 & 9 & 17 \\ 4 & 27 & 13 & 24 & 20 & 34 \\ 2 & 11 & 5 & 9 & 8 & 13 \\ -4 & -24 & -11 & -20 & -18 & -29 \end{pmatrix}$$

.332

$$J = \operatorname{diag}(J_4(-20), J_1(-20), J_1(-20))$$

$$P = \begin{pmatrix} 14 & 1 & 54 & 31 & 48 & 65 \\ -16 & -1 & -58 & -34 & -53 & -70 \\ 12 & 1 & 44 & 26 & 40 & 53 \\ -1 & 0 & -4 & -2 & -4 & -5 \\ -2 & 0 & -9 & -5 & -8 & -11 \\ 14 & 1 & 52 & 30 & 47 & 63 \end{pmatrix}$$

.333

$$J = \operatorname{diag}(J_3(1), J_1(1), J_1(1), J_1(1))$$

$$P = \begin{pmatrix} 12 & 17 & 10 & 1 & 23 & 35 \\ 11 & 15 & 9 & 1 & 21 & 31 \\ -2 & -3 & -2 & 0 & -4 & -6 \\ -32 & -45 & -27 & -3 & -61 & -93 \\ 24 & 34 & 21 & 2 & 47 & 71 \\ -4 & -6 & -4 & 0 & -8 & -13 \end{pmatrix}$$

.334

$$J = \operatorname{diag}(J_3(3), J_3(3))$$

$$P = \begin{pmatrix} -5 & -24 & -11 & -7 & -30 & -49 \\ 2 & 6 & 3 & 2 & 7 & 12 \\ -9 & -34 & -16 & -10 & -43 & -71 \\ -5 & -14 & -7 & -4 & -18 & -30 \\ 3 & 11 & 5 & 3 & 14 & 23 \\ 5 & 17 & 8 & 5 & 22 & 36 \end{pmatrix}$$

.335

$$J = \operatorname{diag}(J_2(-7), J_1(-7), J_1(-10), J_1(-10), J_1(-12))$$

$$P = \begin{pmatrix} -15 & -40 & 13 & 8 & 29 & 2 \\ 3 & 9 & -3 & -2 & -7 & -1 \\ 0 & 4 & -2 & -2 & -5 & -2 \\ -12 & -36 & 12 & 8 & 27 & 3 \\ -8 & -19 & 6 & 3 & 13 & 0 \\ 0 & -2 & 1 & 1 & 2 & 1 \end{pmatrix}$$

.336

$$J = \operatorname{diag}(J_6(5))$$

$$P = \begin{pmatrix} 0 & 0 & 2 & 3 & 0 & 3 \\ 0 & -1 & -1 & 0 & -2 & 0 \\ 1 & 2 & 2 & 0 & 4 & 0 \\ -7 & -7 & -17 & -15 & -15 & -17 \\ -4 & -4 & -9 & -7 & -9 & -8 \\ 2 & 1 & 5 & 6 & 2 & 7 \end{pmatrix}$$

.337

$$J = \operatorname{diag}(J_4(12), J_1(12), J_1(2))$$

$$P = \begin{pmatrix} -1 & -5 & -4 & -4 & -5 & -3 \\ 4 & 13 & 11 & 14 & 14 & 14 \\ 2 & 6 & 5 & 6 & 6 & 7 \\ 3 & 9 & 8 & 11 & 10 & 12 \\ -3 & -9 & -8 & -12 & -10 & -13 \\ 4 & 13 & 11 & 15 & 14 & 16 \end{pmatrix}$$

.338

$$J = \operatorname{diag}(J_2(19), J_2(19), J_2(19))$$

$$P = \begin{pmatrix} -64 & -54 & -21 & -56 & -73 & -103 \\ -52 & -44 & -17 & -45 & -59 & -84 \\ 31 & 26 & 10 & 27 & 35 & 50 \\ 3 & 3 & 1 & 3 & 4 & 5 \\ -4 & -3 & -1 & -3 & -4 & -7 \\ 15 & 13 & 5 & 13 & 17 & 25 \end{pmatrix}$$

.339

$$J = \operatorname{diag}(J_4(-14), J_2(-14))$$

$$P = \begin{pmatrix} -15 & -15 & -17 & -9 & -1 & -19 \\ -18 & -18 & -22 & -13 & -1 & -22 \\ 27 & 26 & 30 & 15 & 2 & 34 \\ -12 & -12 & -14 & -8 & -1 & -15 \\ 57 & 56 & 65 & 35 & 4 & 71 \\ 28 & 27 & 31 & 16 & 2 & 35 \end{pmatrix}$$

.340

$$J = \operatorname{diag}(J_2(6), J_2(6), J_1(6), J_1(1))$$

$$P = \begin{pmatrix} 0 & -2 & -1 & 0 & -1 & -3 \\ 4 & -2 & 6 & 6 & 7 & -3 \\ -1 & 3 & 0 & -1 & 0 & 4 \\ -1 & -5 & -4 & -2 & -5 & -7 \\ 1 & -8 & -2 & 0 & -3 & -11 \\ -5 & -15 & -15 & -10 & -19 & -20 \end{pmatrix}$$

.341

$$J = \operatorname{diag}(J_3(19), J_1(19), J_1(16), J_1(16))$$

$$P = \begin{pmatrix} 2 & 1 & 4 & 2 & 4 & 1 \\ -1 & 0 & -1 & -1 & -1 & -1 \\ -2 & 1 & 6 & -1 & 8 & -6 \\ -1 & -1 & -5 & -1 & -6 & 2 \\ 5 & 1 & 4 & 4 & 4 & 4 \\ -2 & 1 & 7 & -1 & 9 & -6 \end{pmatrix}$$

.342

$$J = \operatorname{diag}(J_2(8), J_1(8), J_1(7), J_1(7), J_1(-2))$$

$$P = \begin{pmatrix} -3 & -3 & -2 & -2 & -4 & -2 \\ -17 & -19 & -18 & -16 & -26 & -5 \\ 11 & 14 & 16 & 14 & 19 & -2 \\ -17 & -18 & -15 & -14 & -25 & -9 \\ 24 & 26 & 23 & 21 & 36 & 10 \\ 2 & 4 & 6 & 5 & 5 & -4 \end{pmatrix}$$

.343

$$J = \operatorname{diag}(J_3(1), J_1(1), J_1(-4), J_1(-18))$$

$$P = \begin{pmatrix} -4 & -2 & -5 & -5 & -6 & -2 \\ -3 & -3 & -4 & -3 & -5 & -1 \\ 2 & 3 & 3 & 2 & 4 & 1 \\ 3 & 1 & 5 & 5 & 5 & 1 \\ 3 & 3 & 6 & 5 & 6 & 0 \\ 3 & 4 & 6 & 4 & 6 & 0 \end{pmatrix}$$

.344

$$J = \operatorname{diag}(J_4(4), J_1(4), J_1(4))$$

$$P = \begin{pmatrix} 0 & -3 & -1 & 0 & 0 & -3 \\ 1 & -1 & 0 & 1 & 1 & -1 \\ -2 & -14 & -4 & -3 & -4 & -18 \\ 0 & 3 & 0 & 1 & 1 & 5 \\ 0 & 1 & 1 & 0 & 0 & 0 \\ -2 & -19 & -5 & -4 & -5 & -25 \end{pmatrix}$$

.345

$$J = \operatorname{diag}(J_2(3), J_2(3), J_1(3), J_1(3))$$

$$P = \begin{pmatrix} 1 & 2 & 1 & 2 & 0 & 3 \\ -11 & -32 & -20 & -38 & 4 & -30 \\ 8 & 23 & 14 & 27 & -3 & 22 \\ -15 & -42 & -26 & -49 & 5 & -40 \\ 14 & 41 & 25 & 48 & -5 & 39 \\ -14 & -41 & -25 & -48 & 5 & -40 \end{pmatrix}$$

.346

$$J = \operatorname{diag}(J_2(19), J_2(16), J_1(0), J_1(-17))$$

$$P = \begin{pmatrix} -1 & -1 & 1 & 0 & -2 & -1 \\ 3 & 1 & 9 & 1 & -2 & 0 \\ -1 & 0 & -5 & -1 & 2 & 0 \\ 2 & 1 & 7 & 0 & -2 & 0 \\ 1 & 1 & 4 & 1 & -1 & 1 \\ 0 & 0 & 2 & 0 & -1 & 0 \end{pmatrix}$$

.347

$$J = \operatorname{diag}(J_4(16), J_2(14))$$

$$P = \begin{pmatrix} -2 & -2 & 0 & 0 & -1 & -3 \\ -6 & -5 & 0 & -1 & -5 & -8 \\ 1 & 1 & 1 & 1 & 3 & -1 \\ -6 & -6 & 0 & -1 & -5 & -8 \\ 1 & 0 & -1 & -1 & -1 & 4 \\ 0 & 0 & 1 & 1 & 2 & -2 \end{pmatrix}$$

.348

$$J = \operatorname{diag}(J_2(11), J_2(3), J_1(0), J_1(-7))$$

$$P = \begin{pmatrix} 2 & 5 & 1 & 8 & 1 & 5 \\ -3 & -7 & -2 & -12 & -2 & -10 \\ 1 & 3 & 1 & 6 & 1 & 5 \\ 1 & 3 & 1 & 5 & 1 & 4 \\ 1 & 3 & 1 & 6 & 1 & 4 \\ -2 & -4 & -1 & -7 & 0 & -4 \end{pmatrix}$$

.349

$$J = \operatorname{diag}(J_2(-14), J_1(-18), J_1(-18), J_2(-20))$$

$$P = \begin{pmatrix} 0 & 2 & 2 & 1 & 3 & 5 \\ -4 & -12 & -11 & -7 & -20 & -25 \\ -2 & -5 & -5 & -3 & -10 & -12 \\ 2 & 7 & 6 & 4 & 11 & 14 \\ 3 & 6 & 6 & 4 & 12 & 13 \\ 1 & 3 & 3 & 2 & 5 & 7 \end{pmatrix}$$

.350

$$J = \operatorname{diag}(J_2(8), J_1(8), J_2(4), J_1(4))$$

$$P = \begin{pmatrix} 9 & 4 & 7 & 5 & 6 & 8 \\ -2 & 0 & -1 & -1 & -2 & -2 \\ -3 & -2 & -3 & -2 & -2 & -3 \\ -12 & -5 & -9 & -7 & -9 & -11 \\ -5 & -1 & -3 & -3 & -5 & -4 \\ 6 & 4 & 6 & 3 & 3 & 6 \end{pmatrix}$$

.351

$$J = \operatorname{diag}(J_3(-17), J_2(-17), J_1(-18))$$

$$P = \begin{pmatrix} -1 & -2 & -2 & -3 & -1 & -2 \\ -2 & -2 & -2 & -3 & 0 & 0 \\ -2 & -2 & -3 & -4 & 1 & 0 \\ 2 & 2 & 3 & 4 & -2 & -2 \\ 2 & 2 & 2 & 3 & 0 & -1 \\ 4 & 5 & 6 & 8 & -1 & -1 \end{pmatrix}$$

.352

$$J = \operatorname{diag}(J_1(19), J_1(19), J_1(15), J_1(15), J_1(9), J_1(7))$$

$$P = \begin{pmatrix} -3 & -2 & -2 & 2 & -1 & -5 \\ 5 & 8 & 5 & 4 & 7 & 5 \\ -3 & -3 & -2 & 0 & -2 & -4 \\ 4 & 5 & 4 & 1 & 4 & 5 \\ 0 & 1 & 1 & 1 & 1 & 0 \\ 0 & -3 & -1 & -5 & -4 & 2 \end{pmatrix}$$

.353

$$J = \operatorname{diag}(J_2(12), J_1(7), J_1(7), J_1(-2), J_1(-3))$$

$$P = \begin{pmatrix} -4 & 1 & -9 & -11 & -7 & -10 \\ -1 & -1 & -3 & -3 & -2 & -4 \\ -2 & 0 & -5 & -6 & -4 & -6 \\ -3 & 0 & -7 & -8 & -6 & -9 \\ -2 & 0 & -4 & -5 & -3 & -5 \\ 3 & 0 & 7 & 8 & 5 & 7 \end{pmatrix}$$

.354

$$J = \operatorname{diag}(J_3(11), J_1(11), J_1(11), J_1(5))$$

$$P = \begin{pmatrix} -1 & -3 & 2 & -1 & -8 & -9 \\ -2 & -6 & 3 & -3 & -16 & -17 \\ 1 & 3 & -1 & 2 & 8 & 9 \\ 0 & -1 & 1 & 0 & -2 & -2 \\ -1 & -2 & 0 & -1 & -5 & -5 \\ -2 & -5 & 2 & -3 & -13 & -13 \end{pmatrix}$$

.355

$$J = \operatorname{diag}(J_2(15), J_2(-3), J_1(-4), J_1(-8))$$

$$P = \begin{pmatrix} 1 & 1 & 1 & 0 & 2 & -1 \\ 4 & 3 & 4 & 2 & 6 & 0 \\ -2 & -2 & 0 & 0 & -1 & 1 \\ 4 & 4 & 2 & 1 & 4 & 0 \\ 5 & 4 & 6 & 3 & 8 & 1 \\ -3 & -3 & -2 & -1 & -3 & -1 \end{pmatrix}$$

.356

$$J = \operatorname{diag}(J_2(0), J_1(0), J_2(-3), J_1(-5))$$

$$P = \begin{pmatrix} -12 & -12 & -10 & -13 & -3 & 0 \\ 9 & 9 & 8 & 10 & 2 & 0 \\ 2 & 1 & 1 & 0 & 0 & 2 \\ -4 & -4 & -3 & -5 & -1 & 1 \\ -1 & 0 & 0 & 1 & 0 & -2 \\ -6 & -6 & -5 & -6 & -1 & -1 \end{pmatrix}$$

.357

$$J = \operatorname{diag}(J_5(-15), J_1(-15))$$

$$P = \begin{pmatrix} 12 & 8 & 15 & 4 & 8 & 18 \\ 9 & 6 & 13 & 4 & 7 & 14 \\ 7 & 5 & 9 & 3 & 5 & 11 \\ 3 & 2 & 4 & 1 & 2 & 4 \\ 1 & 1 & 2 & 1 & 1 & 2 \\ 5 & 3 & 5 & 1 & 2 & 6 \end{pmatrix}$$

.358

$$J = \operatorname{diag}(J_4(-14), J_2(-15))$$

$$P = \begin{pmatrix} -15 & -15 & -18 & -15 & -19 & -24 \\ 9 & 10 & 12 & 10 & 12 & 15 \\ -12 & -12 & -15 & -13 & -15 & -20 \\ -20 & -21 & -25 & -21 & -26 & -33 \\ 2 & 1 & 1 & 1 & 2 & 2 \\ 1 & 1 & 1 & 1 & 1 & 2 \end{pmatrix}$$

.359

$$J = \operatorname{diag}(J_2(11), J_1(11), J_1(6), J_1(5), J_1(4))$$

$$P = \begin{pmatrix} -7 & -2 & -10 & 0 & -6 & -3 \\ 1 & 0 & 2 & 0 & 1 & 0 \\ -5 & -2 & -6 & 1 & -4 & -4 \\ -1 & -1 & -1 & 0 & -1 & -1 \\ -8 & -2 & -10 & 0 & -7 & -4 \\ -9 & -1 & -12 & -1 & -8 & -2 \end{pmatrix}$$

.360

$$J = \operatorname{diag}(J_2(14), J_1(14), J_1(5), J_1(2), J_1(-11))$$

$$P = \begin{pmatrix} 2 & -3 & -3 & -2 & 0 & 0 \\ 1 & -4 & -4 & -4 & -2 & -2 \\ 0 & 4 & 4 & 5 & 3 & 3 \\ -1 & 2 & 2 & 1 & 0 & 0 \\ 0 & 2 & 2 & 3 & 2 & 3 \\ -2 & -11 & -10 & -15 & -11 & -12 \end{pmatrix}$$

.361

$$J = \operatorname{diag}(J_2(20), J_1(20), J_1(20), J_1(19), J_1(6))$$

$$P = \begin{pmatrix} -4 & -7 & -18 & -22 & -36 & -1 \\ -1 & -2 & -6 & -7 & -11 & 1 \\ 0 & 0 & 0 & -1 & -2 & -1 \\ -1 & -1 & -3 & -4 & -7 & -1 \\ -1 & -3 & -9 & -10 & -16 & 2 \\ 1 & 2 & 5 & 6 & 10 & 0 \end{pmatrix}$$

.362

$$J = \operatorname{diag}(J_4(-10), J_2(-10))$$

$$P = \begin{pmatrix} -4 & -2 & -2 & -1 & -4 & -5 \\ -5 & -3 & -3 & -2 & -5 & -8 \\ 7 & 4 & 5 & 2 & 6 & 13 \\ 9 & 5 & 6 & 3 & 9 & 15 \\ 5 & 3 & 5 & 2 & 4 & 12 \\ -4 & -2 & -3 & -1 & -3 & -8 \end{pmatrix}$$

.363

$$J = \operatorname{diag}(J_2(13), J_1(3), J_1(3), J_1(-3), J_1(-7))$$

$$P = \begin{pmatrix} 5 & 2 & 3 & 5 & 6 & -2 \\ 7 & 4 & 5 & 7 & 8 & -1 \\ -4 & 0 & -2 & -2 & -3 & 3 \\ 1 & 1 & 1 & 2 & 2 & 0 \\ -3 & 0 & -2 & -1 & -2 & 2 \\ 6 & 3 & 4 & 6 & 7 & -1 \end{pmatrix}$$

.364

$$J = \operatorname{diag}(J_3(11), J_2(11), J_1(11))$$

$$P = \begin{pmatrix} 1 & 1 & 1 & 1 & 0 & 2 \\ 3 & 2 & 4 & 3 & 4 & 3 \\ 15 & 11 & 16 & 14 & 7 & 21 \\ 7 & 5 & 8 & 7 & 5 & 9 \\ 17 & 12 & 18 & 16 & 9 & 23 \\ 12 & 8 & 13 & 11 & 7 & 16 \end{pmatrix}$$

.365

$$J = \operatorname{diag}(J_4(14), J_2(14))$$

$$P = \begin{pmatrix} 21 & 21 & 10 & 6 & 4 & 24 \\ -7 & -7 & -3 & -2 & -1 & -8 \\ 4 & 3 & 2 & 1 & 0 & 4 \\ -6 & -6 & -3 & -2 & -1 & -7 \\ 10 & 11 & 5 & 3 & 2 & 12 \\ 5 & 3 & 3 & 1 & -1 & 5 \end{pmatrix}$$

.366

$$J = \operatorname{diag}(J_6(11))$$

$$P = \begin{pmatrix} 2 & -1 & -2 & -2 & 3 & -4 \\ -1 & 1 & 2 & 2 & -1 & 3 \\ 2 & 3 & 8 & 9 & 6 & 10 \\ 3 & 4 & 12 & 14 & 9 & 15 \\ 1 & 2 & 5 & 5 & 3 & 6 \\ -1 & -1 & -2 & -2 & -2 & -2 \end{pmatrix}$$

.367

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(-10), J_1(-12), J_1(-16))$$

$$P = \begin{pmatrix} 0 & -1 & -1 & 1 & 0 & 3 \\ 4 & 1 & 3 & 3 & 5 & 5 \\ -4 & -2 & -3 & -1 & -5 & -3 \\ -5 & -1 & -3 & -3 & -6 & -7 \\ 5 & 2 & 4 & 3 & 6 & 5 \\ 2 & 2 & 2 & 0 & 2 & -1 \end{pmatrix}$$

.368

$$J = \operatorname{diag}(J_1(14), J_1(14), J_2(13), J_1(11), J_1(-17))$$

$$P = \begin{pmatrix} -5 & -3 & -4 & -3 & -6 & -3 \\ -6 & -3 & -5 & -4 & -7 & -2 \\ 1 & 0 & 1 & 1 & 1 & -2 \\ 2 & 2 & 2 & 1 & 3 & 3 \\ -9 & -5 & -8 & -5 & -11 & -4 \\ 0 & -1 & 0 & 0 & 0 & -3 \end{pmatrix}$$

.369

$$J = \operatorname{diag}(J_2(5), J_2(5), J_1(1), J_1(-8))$$

$$P = \begin{pmatrix} 3 & 3 & 4 & 0 & 0 & 1 \\ -15 & -16 & -20 & 1 & -1 & -1 \\ 5 & 4 & 6 & 0 & -1 & 2 \\ 11 & 11 & 14 & -1 & 0 & 1 \\ 5 & 5 & 6 & -1 & -1 & 0 \\ 6 & 5 & 7 & 0 & -1 & 2 \end{pmatrix}$$

.370

$$J = \operatorname{diag}(J_3(20), J_1(20), J_1(17), J_1(17))$$

$$P = \begin{pmatrix} 4 & 2 & 11 & 10 & 13 & 10 \\ -2 & -1 & -5 & -4 & -6 & -4 \\ 2 & 1 & 2 & 1 & 6 & -1 \\ 1 & 0 & 1 & 0 & 3 & -1 \\ 0 & 0 & 2 & 2 & 1 & 3 \\ -5 & -2 & -11 & -9 & -15 & -8 \end{pmatrix}$$

.371

$$J = \operatorname{diag}(J_1(11), J_1(11), J_1(8), J_1(8), J_2(7), J_1(-9))$$

$$P = \begin{pmatrix} 4 & 7 & -11 & 0 & -11 & -9 & 1 \\ 3 & 7 & -18 & -2 & -18 & -13 & -2 \\ -3 & -6 & 12 & 1 & 12 & 9 & 0 \\ 0 & 3 & -9 & -1 & -10 & -7 & -4 \\ 1 & 3 & -8 & -1 & -8 & -6 & -1 \\ -3 & -4 & 5 & 0 & 4 & 4 & -3 \\ 1 & 2 & -4 & 0 & -4 & -3 & 0 \end{pmatrix}$$

.372

$$J = \operatorname{diag}(J_2(-9), J_2(-9), J_1(-12), J_1(-14), J_1(-19))$$

$$P = \begin{pmatrix} 5 & 4 & 8 & 5 & 6 & 7 & -3 \\ 2 & 2 & 3 & 2 & 3 & 3 & 0 \\ -4 & -3 & -5 & -3 & -5 & -4 & 2 \\ -5 & 1 & -6 & -3 & -2 & 2 & 17 \\ -1 & -5 & -2 & -2 & -5 & -8 & -12 \\ -3 & -5 & -4 & -3 & -6 & -7 & -6 \\ 0 & 4 & 2 & 2 & 3 & 8 & 12 \end{pmatrix}$$

.373

$$J = \operatorname{diag}(J_4(9), J_2(9), J_1(9))$$

$$P = \begin{pmatrix} 7 & 11 & 8 & 7 & 7 & 6 & 8 \\ 4 & 2 & 3 & -3 & -3 & -4 & 6 \\ -7 & -9 & -8 & -5 & -4 & -4 & -9 \\ -1 & -3 & -2 & -3 & -3 & -3 & -1 \\ 23 & 29 & 25 & 14 & 12 & 10 & 29 \\ -15 & -16 & -15 & -4 & -3 & -1 & -20 \\ 2 & -1 & 1 & -4 & -5 & -5 & 4 \end{pmatrix}$$

.374

$$J = \operatorname{diag}(J_4(-5), J_2(-5), J_1(-5))$$

$$P = \begin{pmatrix} -15 & -27 & -15 & -3 & -26 & -39 & -41 \\ -20 & -37 & -21 & -1 & -35 & -50 & -56 \\ 19 & 36 & 21 & -2 & 34 & 45 & 54 \\ -12 & -22 & -12 & -2 & -21 & -31 & -33 \\ -4 & -8 & -6 & 6 & -7 & -4 & -12 \\ 7 & 14 & 9 & -5 & 13 & 13 & 21 \\ -1 & -2 & -1 & -1 & -2 & -4 & -3 \end{pmatrix}$$

.375

$$J = \operatorname{diag}(J_3(17), J_2(8), J_1(-7), J_1(-10))$$

$$P = \begin{pmatrix} -1 & 0 & -1 & -2 & 0 & -3 & -3 \\ 3 & 1 & 3 & 3 & 2 & 5 & 6 \\ 1 & 1 & 1 & 1 & 1 & 1 & 0 \\ 0 & -1 & 0 & 0 & -1 & 0 & 0 \\ -3 & -1 & -3 & -3 & -2 & -5 & -7 \\ 2 & 1 & 2 & 3 & 1 & 5 & 6 \\ -1 & -1 & 0 & -1 & -1 & -2 & -4 \end{pmatrix}$$

.376

$$J = \operatorname{diag}(J_2(20), J_1(20), J_1(20), J_1(19), J_1(19), J_1(18))$$

$$P = \begin{pmatrix} 19 & 15 & 4 & 7 & 18 & 14 & 20 \\ 8 & 6 & 2 & 3 & 7 & 6 & 8 \\ -21 & -16 & -4 & -7 & -21 & -14 & -23 \\ -10 & -8 & -2 & -3 & -10 & -6 & -11 \\ 12 & 9 & 2 & 4 & 12 & 8 & 13 \\ -6 & -5 & -1 & -2 & -6 & -4 & -7 \\ -16 & -13 & -3 & -5 & -16 & -11 & -18 \end{pmatrix}$$

.377

$$J = \operatorname{diag}(J_3(-17), J_1(-18), J_1(-18), J_1(-18), J_1(-20))$$

$$P = \begin{pmatrix} 0 & 0 & 0 & 0 & 0 & 0 & -1 \\ 1 & 2 & 11 & 3 & 24 & 2 & 24 \\ 1 & 4 & 19 & 4 & 39 & 2 & 40 \\ 0 & 0 & -1 & 0 & -2 & 0 & -2 \\ 2 & 5 & 23 & 5 & 47 & 3 & 48 \\ -2 & -6 & -29 & -6 & -59 & -3 & -60 \\ -1 & -2 & -11 & -2 & -23 & -1 & -23 \end{pmatrix}$$

.378

$$J = \operatorname{diag}(J_2(1), J_2(1), J_1(1), J_1(1), J_1(-7))$$

$$P = \begin{pmatrix} 0 & 2 & -2 & 3 & 3 & 2 & -2 \\ 1 & 2 & 4 & 3 & 2 & 1 & 5 \\ 1 & 6 & 0 & 7 & 8 & 7 & 0 \\ 0 & 3 & -1 & 4 & 4 & 2 & -1 \\ 0 & -3 & 2 & -4 & -4 & -2 & 2 \\ 0 & -1 & 0 & -1 & -1 & -1 & 0 \\ -1 & 0 & -5 & -1 & 1 & 2 & -6 \end{pmatrix}$$

.379

$$J = \operatorname{diag}(J_2(10), J_2(-6), J_1(-8), J_1(-8), J_1(-18))$$

$$P = \begin{pmatrix} 0 & -1 & -1 & -3 & 0 & -5 & -1 \\ 1 & 1 & 2 & -3 & 3 & -5 & 0 \\ 0 & -1 & 0 & 0 & 2 & -1 & -3 \\ 0 & 0 & -1 & -2 & -2 & -3 & 2 \\ 1 & 1 & 1 & -1 & 2 & -2 & 0 \\ 0 & 1 & 0 & 3 & -1 & 5 & 1 \\ 0 & 0 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}$$

.380

$$J = \operatorname{diag}(J_2(9), J_1(9), J_1(9), J_2(-2), J_1(-5))$$

$$P = \begin{pmatrix} 4 & 2 & 3 & 4 & 2 & 3 & 5 \\ 1 & 1 & 2 & 1 & 0 & 0 & 5 \\ -2 & -1 & -1 & -2 & -1 & -2 & -1 \\ 3 & 2 & 2 & 3 & 2 & 3 & 4 \\ 0 & -1 & -1 & 0 & 0 & 0 & -3 \\ -3 & -2 & -4 & -2 & 0 & 0 & -11 \\ 0 & 0 & -2 & 1 & 1 & 2 & -7 \end{pmatrix}$$

.381

$$J = \operatorname{diag}(J_3(9), J_1(9), J_1(6), J_1(5), J_1(3))$$

$$P = \begin{pmatrix} 1 & -5 & -3 & 7 & -9 & 1 & -13 \\ 1 & -3 & -2 & 5 & -6 & 1 & -9 \\ 1 & 1 & 1 & 2 & 2 & 4 & 3 \\ 4 & -4 & -2 & 13 & -7 & 9 & -11 \\ 5 & -2 & -1 & 14 & -4 & 12 & -7 \\ -1 & -2 & -2 & -2 & -4 & -5 & -6 \\ -2 & 1 & 1 & -5 & 2 & -4 & 4 \end{pmatrix}$$

.382

$$J = \operatorname{diag}(J_3(17), J_1(3), J_1(3), J_1(2), J_1(-14))$$

$$P = \begin{pmatrix} -3 & -3 & -2 & 0 & 0 & -1 & -1 \\ 6 & 4 & 4 & 3 & 3 & 5 & 1 \\ -3 & 0 & -1 & -2 & -3 & -4 & 2 \\ 2 & 1 & 1 & 1 & 1 & 2 & 0 \\ -3 & -4 & -3 & -2 & -1 & -2 & -3 \\ 5 & 4 & 4 & 1 & 1 & 3 & 2 \\ 3 & 2 & 2 & 2 & 2 & 3 & 1 \end{pmatrix}$$

.383

$$J = \operatorname{diag}(J_4(0), J_1(0), J_1(-1), J_1(-5))$$

$$P = \begin{pmatrix} -5 & -1 & 1 & -1 & -1 & -3 & 2 \\ -2 & -3 & -1 & -3 & -2 & -6 & -3 \\ 3 & 6 & 0 & 7 & 4 & 12 & 5 \\ 4 & 4 & -2 & 6 & 3 & 9 & 1 \\ 5 & 4 & -1 & 5 & 3 & 9 & 1 \\ -2 & -1 & -1 & 0 & -1 & -2 & -1 \\ -3 & -5 & -2 & -4 & -3 & -9 & -5 \end{pmatrix}$$

.384

$$J = \operatorname{diag}(J_2(14), J_1(14), J_1(7), J_1(7), J_1(-1), J_1(-15))$$

$$P = \begin{pmatrix} -1 & 1 & -1 & 1 & 0 & 2 & -1 \\ 1 & 3 & 2 & 2 & 2 & 2 & 2 \\ 1 & 1 & 3 & 0 & 3 & -2 & -1 \\ 2 & 5 & 5 & 2 & 6 & 0 & -1 \\ 0 & 2 & 0 & 1 & 1 & 2 & -1 \\ 1 & 4 & 3 & 2 & 4 & 1 & -1 \\ 0 & 2 & 1 & 2 & 2 & 1 & 0 \end{pmatrix}$$

.385

$$J = \operatorname{diag}(J_5(11), J_2(11))$$

$$P = \begin{pmatrix} 4 & 6 & 7 & 7 & 7 & 12 & 8 \\ -3 & -5 & -2 & 2 & -4 & 7 & -9 \\ 1 & 1 & 3 & 5 & 2 & 11 & 0 \\ 1 & 0 & 7 & 14 & 3 & 31 & -4 \\ 3 & 7 & -3 & -14 & 3 & -35 & 16 \\ 3 & 7 & -2 & -12 & 3 & -30 & 15 \\ -1 & -3 & 4 & 11 & 0 & 26 & -8 \end{pmatrix}$$

.386

$$J = \operatorname{diag}(J_3(15), J_2(15), J_1(11), J_1(5))$$

$$P = \begin{pmatrix} -2 & -4 & -3 & -1 & -7 & -1 & -1 \\ 0 & -2 & -1 & 0 & -3 & 1 & 2 \\ -4 & -6 & -5 & -2 & -10 & -4 & -6 \\ 1 & -3 & -1 & 1 & -6 & 4 & 5 \\ -4 & -4 & -4 & -2 & -6 & -5 & -7 \\ -4 & -4 & -4 & -2 & -7 & -5 & -7 \\ 8 & 9 & 9 & 4 & 16 & 9 & 13 \end{pmatrix}$$

.387

$$J = \operatorname{diag}(J_3(9), J_2(9), J_1(7), J_1(7))$$

$$P = \begin{pmatrix} 10 & 0 & 0 & 5 & 7 & 2 & 12 \\ 27 & 3 & 2 & 14 & 20 & 5 & 28 \\ -25 & -2 & -2 & -13 & -18 & -5 & -26 \\ -24 & -2 & -2 & -13 & -17 & -5 & -25 \\ -23 & -2 & -2 & -12 & -17 & -4 & -24 \\ -25 & -2 & -1 & -13 & -18 & -5 & -27 \\ 7 & 0 & -1 & 3 & 5 & 1 & 9 \end{pmatrix}$$

.388

$$J = \operatorname{diag}(J_2(-5), J_2(-5), J_2(-15), J_1(-15))$$

$$P = \begin{pmatrix} 0 & 0 & 2 & 4 & -1 & -1 & -1 \\ -5 & -3 & -10 & -14 & -8 & -8 & -9 \\ -1 & 0 & 2 & 4 & -2 & -2 & -2 \\ 5 & 3 & 8 & 10 & 9 & 8 & 10 \\ 0 & 1 & 5 & 9 & -1 & -1 & -1 \\ 1 & 1 & 3 & 4 & 2 & 2 & 2 \\ -1 & -1 & -4 & -7 & -1 & -1 & -1 \end{pmatrix}$$

.389

$$J = \operatorname{diag}(J_2(0), J_1(0), J_1(0), J_1(-4), J_1(-9), J_1(-13))$$

$$P = \begin{pmatrix} 0 & 0 & 0 & -1 & 0 & 0 & -1 \\ -5 & -1 & -2 & -3 & -2 & -5 & 0 \\ -7 & -5 & -3 & -7 & -8 & -6 & -4 \\ -4 & -4 & -2 & -6 & -6 & -3 & -5 \\ 4 & -1 & 1 & 1 & -1 & 5 & -2 \\ 5 & 3 & 2 & 4 & 5 & 4 & 2 \\ -1 & 1 & 0 & 0 & 1 & -2 & 1 \end{pmatrix}$$

.390

$$J = \operatorname{diag}(J_6(-2), J_1(-14))$$

$$P = \begin{pmatrix} 7 & 22 & 12 & 22 & 25 & 26 & 0 \\ -12 & -37 & -18 & -38 & -44 & -44 & 4 \\ -2 & -5 & -2 & -5 & -6 & -6 & 1 \\ -4 & -11 & -3 & -13 & -15 & -13 & 7 \\ -4 & -12 & -5 & -13 & -15 & -14 & 4 \\ 8 & 26 & 14 & 26 & 30 & 31 & 0 \\ 8 & 23 & 12 & 23 & 27 & 28 & 0 \end{pmatrix}$$

.391

$$J = \operatorname{diag}(J_2(16), J_2(16), J_2(10), J_1(10))$$

$$P = \begin{pmatrix} 3 & 4 & 7 & -2 & 2 & 1 & 5 \\ 6 & 4 & 13 & -7 & 2 & -3 & 7 \\ -4 & -2 & -9 & 6 & -1 & 3 & -6 \\ 3 & 4 & 8 & -3 & 2 & 1 & 7 \\ 6 & 3 & 13 & -9 & 2 & -4 & 9 \\ -5 & -1 & -10 & 8 & -1 & 5 & -6 \\ 1 & 0 & 2 & -2 & 0 & -1 & 2 \end{pmatrix}$$

.392

$$J = \operatorname{diag}(J_3(10), J_2(10), J_1(9), J_1(4))$$

$$P = \begin{pmatrix} -1 & -1 & -3 & 1 & -2 & 0 & -8 \\ 1 & 1 & 3 & 0 & 2 & 1 & 6 \\ 5 & 3 & 8 & 0 & 9 & 2 & 16 \\ 7 & 5 & 13 & -1 & 13 & 3 & 28 \\ -6 & -3 & -8 & 0 & -10 & -2 & -16 \\ -3 & -1 & -3 & 0 & -5 & -1 & -5 \\ 5 & 3 & 7 & 0 & 9 & 2 & 13 \end{pmatrix}$$

.393

$$J = \operatorname{diag}(J_4(-12), J_1(-12), J_1(-12), J_1(-12))$$

$$P = \begin{pmatrix} -16 & -9 & -23 & -35 & -11 & -20 & -42 \\ -9 & -5 & -12 & -19 & -6 & -10 & -23 \\ -13 & -8 & -17 & -27 & -10 & -15 & -30 \\ -6 & -3 & -10 & -14 & -4 & -9 & -17 \\ 1 & 1 & 0 & 1 & 1 & 0 & 0 \\ -7 & -4 & -9 & -14 & -5 & -8 & -16 \\ 15 & 9 & 21 & 32 & 11 & 18 & 37 \end{pmatrix}$$

.394

$$J = \operatorname{diag}(J_4(-7), J_3(-7))$$

$$P = \begin{pmatrix} -9 & -8 & -7 & -16 & -8 & -4 & -18 \\ 32 & 25 & 24 & 55 & 27 & 13 & 60 \\ 29 & 22 & 22 & 51 & 25 & 12 & 54 \\ -17 & -14 & -13 & -29 & -14 & -7 & -33 \\ 53 & 41 & 40 & 91 & 45 & 21 & 99 \\ -25 & -19 & -19 & -44 & -22 & -10 & -46 \\ -22 & -18 & -17 & -38 & -19 & -9 & -42 \end{pmatrix}$$

.395

$$J = \operatorname{diag}(J_3(17), J_1(17), J_1(16), J_1(16), J_1(4))$$

$$P = \begin{pmatrix} -1 & -2 & -4 & 0 & 2 & -7 & 0 \\ -3 & -7 & -13 & -2 & 4 & -21 & 1 \\ 5 & 12 & 21 & 3 & -5 & 34 & -1 \\ 5 & 11 & 20 & 3 & -5 & 32 & -1 \\ 6 & 13 & 22 & 4 & -3 & 35 & -1 \\ 0 & -1 & -2 & 0 & 2 & -4 & 0 \\ -7 & -14 & -24 & -4 & 4 & -38 & 1 \end{pmatrix}$$

.396

$$J = \operatorname{diag}(J_4(9), J_2(8), J_1(2))$$

$$P = \begin{pmatrix} 4 & 0 & 7 & 2 & 2 & 8 & 1 \\ -10 & -3 & -13 & -1 & -9 & -18 & -14 \\ -1 & 0 & -3 & -1 & 0 & -3 & 1 \\ 3 & 2 & 3 & -1 & 4 & 5 & 8 \\ -15 & -2 & -24 & -6 & -10 & -29 & -10 \\ 5 & 0 & 9 & 3 & 2 & 10 & 0 \\ 4 & -2 & 11 & 6 & -1 & 10 & -9 \end{pmatrix}$$

.397

$$J = \operatorname{diag}(J_2(19), J_1(19), J_2(18), J_1(17), J_1(17))$$

$$P = \begin{pmatrix} -3 & 3 & -4 & -4 & -3 & 0 & -11 \\ 12 & 7 & 4 & 6 & 10 & 11 & 9 \\ 4 & 4 & 1 & 2 & 4 & 4 & 1 \\ 4 & 2 & 2 & 3 & 4 & 3 & 4 \\ 6 & 4 & 2 & 3 & 5 & 6 & 4 \\ -11 & -10 & -2 & -4 & -9 & -12 & -2 \\ -8 & -1 & -5 & -6 & -7 & -5 & -13 \end{pmatrix}$$

.398

$$J = \operatorname{diag}(J_4(18), J_1(18), J_1(18), J_1(18))$$

$$P = \begin{pmatrix} -21 & -26 & -10 & -5 & -30 & -3 & -33 \\ 21 & 25 & 13 & 6 & 30 & 7 & 31 \\ 23 & 28 & 13 & 6 & 33 & 6 & 35 \\ 26 & 31 & 13 & 6 & 36 & 5 & 40 \\ 19 & 22 & 11 & 5 & 26 & 6 & 28 \\ -37 & -44 & -20 & -9 & -51 & -9 & -56 \\ -2 & -2 & -2 & -1 & -3 & -2 & -2 \end{pmatrix}$$

.399

$$J = \operatorname{diag}(J_7(5))$$

$$P = \begin{pmatrix} -12 & -2 & -12 & -1 & -7 & -12 & 0 \\ -5 & -1 & -5 & -1 & -3 & -5 & 0 \\ 13 & 2 & 12 & 2 & 8 & 13 & 1 \\ 1 & -1 & 1 & -2 & -1 & 0 & -3 \\ 16 & 1 & 16 & 0 & 8 & 15 & -4 \\ 16 & 1 & 15 & 0 & 8 & 15 & -3 \\ -3 & -1 & -3 & 0 & -2 & -3 & -1 \end{pmatrix}$$

.400

$$J = \operatorname{diag}(J_4(-12), J_2(-12), J_1(-14))$$

$$P = \begin{pmatrix} -11 & -1 & -15 & -16 & -7 & 0 & -27 \\ 4 & 2 & 5 & 4 & 3 & 2 & 6 \\ -3 & 0 & -4 & -4 & -2 & 0 & -7 \\ 6 & 8 & 7 & 2 & 6 & 9 & -2 \\ 3 & 1 & 4 & 4 & 2 & 1 & 6 \\ 6 & 2 & 8 & 7 & 4 & 2 & 11 \\ 0 & -4 & 0 & 3 & -1 & -5 & 8 \end{pmatrix}$$

.401

$$J = \operatorname{diag}(J_4(-13), J_3(-14))$$

$$P = \begin{pmatrix} 0 & 0 & 0 & -1 & -1 & 1 & -3 \\ -7 & 1 & -6 & -16 & -9 & 6 & -32 \\ 27 & 1 & 20 & 46 & 18 & 2 & 65 \\ 7 & 0 & 5 & 12 & 5 & 0 & 18 \\ -25 & 0 & -19 & -45 & -19 & 2 & -69 \\ -6 & 1 & -5 & -14 & -8 & 6 & -29 \\ -30 & -1 & -22 & -51 & -20 & -2 & -73 \end{pmatrix}$$

.402

$$J = \operatorname{diag}(J_3(5), J_1(5), J_1(5), J_1(2), J_1(-1))$$

$$P = \begin{pmatrix} 0 & 1 & 1 & -1 & 2 & 2 & -1 \\ 0 & 1 & 2 & -2 & 5 & 2 & -2 \\ -1 & 1 & 2 & -3 & 4 & 1 & -4 \\ 1 & 0 & -2 & 3 & -6 & 0 & 4 \\ -3 & -6 & 0 & -2 & 5 & -9 & -3 \\ 1 & 1 & 0 & 1 & 0 & 2 & 2 \\ 0 & -5 & -3 & 4 & -3 & -7 & 5 \end{pmatrix}$$

.403

$$J = \operatorname{diag}(J_2(-9), J_1(-12), J_1(-12), J_1(-14), J_1(-14), J_1(-17))$$

$$P = \begin{pmatrix} -10 & 2 & 1 & -14 & -10 & -18 & 5 \\ -11 & -3 & -2 & -13 & -12 & -17 & -2 \\ 0 & 2 & 1 & -1 & 0 & -1 & 3 \\ -3 & 3 & 2 & -6 & -3 & -7 & 5 \\ -3 & 0 & 0 & -4 & -3 & -5 & 1 \\ -5 & -3 & -2 & -5 & -6 & -7 & -3 \\ -13 & -1 & -1 & -17 & -14 & -22 & 1 \end{pmatrix}$$

.404

$$J = \operatorname{diag}(J_4(17), J_1(17), J_1(16), J_1(16))$$

$$P = \begin{pmatrix} 5 & 2 & 0 & 3 & 0 & 4 & 2 \\ -2 & 0 & 2 & -5 & 3 & -8 & 6 \\ -8 & -1 & 9 & -20 & 13 & -35 & 26 \\ -2 & -1 & 2 & -5 & 3 & -9 & 6 \\ 1 & 0 & -2 & 4 & -3 & 7 & -6 \\ 2 & -1 & -4 & 8 & -6 & 14 & -13 \\ -2 & 0 & 6 & -12 & 9 & -22 & 19 \end{pmatrix}$$

.405

$$J = \operatorname{diag}(J_6(-7), J_1(-7))$$

$$P = \begin{pmatrix} 9 & 11 & 0 & 12 & 8 & 10 & 14 \\ 0 & -1 & 0 & -1 & 0 & 0 & -2 \\ -6 & -12 & 0 & -13 & -3 & -5 & -20 \\ 0 & 7 & 0 & 7 & -3 & -2 & 15 \\ -23 & -24 & -1 & -27 & -21 & -26 & -27 \\ 3 & 8 & 0 & 8 & 1 & 2 & 14 \\ 25 & 31 & 1 & 34 & 21 & 27 & 40 \end{pmatrix}$$

.406

$$J = \operatorname{diag}(J_3(1), J_2(1), J_1(1), J_1(1))$$

$$P = \begin{pmatrix} -3 & -4 & -2 & -2 & -2 & -2 & -4 \\ -12 & -8 & -2 & -4 & -17 & -29 & 1 \\ -3 & -1 & 0 & 0 & -5 & -9 & 2 \\ -4 & -3 & -1 & -1 & -5 & -8 & -1 \\ 14 & 9 & 2 & 4 & 21 & 36 & -2 \\ -16 & -11 & -3 & -4 & -23 & -38 & 0 \\ -3 & -2 & 0 & -1 & -5 & -9 & 1 \end{pmatrix}$$

.407

$$J = \operatorname{diag}(J_2(6), J_1(6), J_2(0), J_1(-5), J_1(-12))$$

$$P = \begin{pmatrix} -1 & -1 & 0 & -1 & -1 & 0 & 1 \\ 6 & 7 & -1 & 6 & 8 & -1 & -3 \\ 5 & 1 & 3 & 3 & 5 & 1 & 5 \\ -8 & -3 & -4 & -5 & -8 & -1 & -6 \\ 0 & -2 & 2 & -1 & -1 & 1 & 3 \\ 0 & -1 & 1 & 0 & 0 & 0 & 2 \\ -3 & -5 & 2 & -3 & -4 & 1 & 5 \end{pmatrix}$$

.408

$$J = \operatorname{diag}(J_1(2), J_1(2), J_1(-5), J_1(-5), J_2(-9), J_1(-11))$$

$$P = \begin{pmatrix} 2 & 2 & 4 & 0 & 9 & 2 & 3 \\ 1 & 0 & -1 & 2 & -2 & -2 & 2 \\ 0 & -1 & -3 & -2 & -4 & -2 & -4 \\ 0 & -2 & -7 & -2 & -10 & -5 & -6 \\ -1 & 0 & 1 & -1 & 1 & 2 & -1 \\ 0 & 2 & 6 & 0 & 10 & 5 & 3 \\ 1 & 1 & 2 & -2 & 6 & 2 & -1 \end{pmatrix}$$

.409

$$J = \operatorname{diag}(J_3(7), J_2(7), J_1(6), J_1(6))$$

$$P = \begin{pmatrix} -4 & -12 & -15 & -3 & -3 & -15 & -6 \\ 8 & 18 & 25 & 4 & 5 & 21 & 15 \\ -5 & -9 & -14 & -2 & -3 & -9 & -11 \\ 8 & 13 & 21 & 3 & 4 & 13 & 17 \\ 2 & 3 & 5 & 1 & 1 & 3 & 4 \\ 3 & 8 & 11 & 2 & 2 & 10 & 5 \\ 7 & 18 & 24 & 4 & 5 & 22 & 12 \end{pmatrix}$$

.410

$$J = \operatorname{diag}(J_2(-12), J_2(-12), J_1(-12), J_1(-12), J_1(-14))$$

$$P = \begin{pmatrix} -14 & 27 & 22 & 11 & 25 & 66 & 26 \\ -9 & 17 & 14 & 7 & 16 & 42 & 17 \\ 21 & -37 & -31 & -13 & -31 & -90 & -32 \\ -7 & 11 & 10 & 3 & 8 & 27 & 8 \\ 4 & -5 & -5 & -1 & -3 & -13 & -3 \\ 15 & -28 & -23 & -11 & -25 & -68 & -26 \\ -18 & 28 & 25 & 8 & 21 & 69 & 21 \end{pmatrix}$$

.411

$$J = \operatorname{diag}(J_2(16), J_1(16), J_1(15), J_1(15), J_1(15), J_1(7))$$

$$P = \begin{pmatrix} 1 & 0 & 0 & 2 & 2 & 2 & 2 \\ 2 & 0 & 0 & 5 & 4 & 6 & 5 \\ 16 & -2 & 3 & 14 & 10 & 25 & 10 \\ -20 & 3 & -5 & -10 & -6 & -25 & -5 \\ -8 & 1 & -2 & -5 & -3 & -11 & -3 \\ 2 & 0 & 0 & 4 & 3 & 5 & 4 \\ 7 & -1 & 1 & 8 & 6 & 12 & 6 \end{pmatrix}$$

.412

$$J = \operatorname{diag}(J_3(5), J_2(5), J_1(5), J_1(0))$$

$$P = \begin{pmatrix} 6 & 12 & 30 & 11 & 5 & 30 & 33 \\ 0 & 3 & 9 & 3 & -2 & 6 & 19 \\ 6 & 12 & 30 & 11 & 5 & 30 & 34 \\ 2 & 3 & 9 & 3 & 2 & 9 & 10 \\ -1 & -2 & -6 & -2 & -1 & -6 & -8 \\ -1 & -2 & -5 & -2 & -1 & -5 & -5 \\ 3 & 3 & 8 & 3 & 4 & 10 & 3 \end{pmatrix}$$

.413

$$J = \operatorname{diag}(J_3(12), J_3(12), J_1(12))$$

$$P = \begin{pmatrix} 12 & 5 & 9 & 5 & 13 & 10 & 5 \\ 19 & 22 & 0 & 34 & 35 & -13 & 53 \\ 2 & -3 & 5 & -6 & -2 & 9 & -11 \\ 13 & 12 & 3 & 18 & 21 & -3 & 27 \\ -12 & -12 & -2 & -18 & -20 & 4 & -27 \\ -26 & -31 & 0 & -48 & -49 & 19 & -75 \\ -18 & -16 & -5 & -23 & -28 & 2 & -34 \end{pmatrix}$$

.414

$$J = \operatorname{diag}(J_3(16), J_1(16), J_1(16), J_1(16), J_1(16))$$

$$P = \begin{pmatrix} 1 & 0 & 3 & 1 & 1 & 4 & 4 \\ -3 & 0 & -6 & -5 & -5 & -7 & -8 \\ -22 & -3 & -72 & -29 & -28 & -93 & -99 \\ -41 & -6 & -137 & -54 & -52 & -177 & -188 \\ 0 & 0 & -2 & 0 & 0 & -3 & -3 \\ -14 & -2 & -48 & -19 & -18 & -62 & -66 \\ 19 & 3 & 67 & 24 & 23 & 87 & 92 \end{pmatrix}$$

.415

$$J = \operatorname{diag}(J_4(-15), J_1(-15), J_1(-15), J_1(-18))$$

$$P = \begin{pmatrix} -5 & -4 & -6 & -7 & -3 & -11 & -5 \\ 12 & -1 & 9 & 21 & 0 & 30 & -2 \\ -1 & -3 & -2 & 0 & -2 & -1 & -4 \\ 7 & -3 & 4 & 14 & -2 & 19 & -5 \\ -4 & -4 & -5 & -5 & -3 & -8 & -5 \\ 5 & -4 & 2 & 11 & -3 & 14 & -6 \\ 2 & -1 & 1 & 5 & -1 & 6 & -2 \end{pmatrix}$$

.416

$$J = \operatorname{diag}(J_5(12), J_2(12))$$

$$P = \begin{pmatrix} -2 & -4 & -2 & -3 & -4 & -3 & -4 \\ 31 & 20 & -1 & 34 & 26 & 36 & -11 \\ 12 & 11 & 2 & 14 & 13 & 15 & 1 \\ 7 & -15 & -16 & 3 & -12 & 3 & -37 \\ -13 & -15 & -5 & -16 & -17 & -17 & -7 \\ -18 & 1 & 11 & -17 & -4 & -18 & 29 \\ 27 & 31 & 10 & 33 & 35 & 35 & 14 \end{pmatrix}$$

.417

$$J = \operatorname{diag}(J_5(-13), J_2(-13))$$

$$P = \begin{pmatrix} 1 & 3 & 3 & 0 & 0 & 1 & -2 \\ 1 & 4 & 0 & -2 & 1 & 0 & -7 \\ 1 & 3 & -4 & -3 & 3 & 0 & -9 \\ 0 & -1 & 0 & 0 & 0 & 0 & 1 \\ -1 & -4 & -5 & -1 & 1 & -1 & 1 \\ 2 & 2 & -2 & -1 & 3 & 2 & -5 \\ 1 & 1 & 0 & 0 & 1 & 1 & -1 \end{pmatrix}$$

.418

$$J = \operatorname{diag}(J_1(3), J_1(3), J_2(-13), J_1(-14), J_1(-14), J_1(-19))$$

$$P = \begin{pmatrix} -1 & 0 & -2 & 0 & -3 & -1 & -5 \\ 3 & 1 & 5 & 1 & 9 & 2 & 13 \\ 1 & 0 & 2 & -1 & 5 & 0 & 8 \\ -2 & -1 & -3 & 0 & -6 & -2 & -8 \\ 1 & 0 & 3 & 0 & 5 & 0 & 9 \\ -1 & 0 & -4 & -1 & -6 & 0 & -11 \\ 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}$$

.419

$$J = \operatorname{diag}(J_4(9), J_1(9), J_1(8), J_1(6))$$

$$P = \begin{pmatrix} -8 & -7 & -10 & -10 & -19 & -26 & 5 \\ 1 & 1 & 2 & 3 & 4 & 6 & -3 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 \\ -3 & -2 & -3 & -2 & -5 & -7 & 0 \\ -13 & -11 & -15 & -13 & -28 & -38 & 5 \\ -4 & -3 & -4 & -2 & -7 & -9 & 0 \\ -7 & -5 & -6 & -3 & -11 & -14 & -2 \end{pmatrix}$$

.420

$$J = \operatorname{diag}(J_2(-9), J_1(-9), J_1(-9), J_3(-12))$$

$$P = \begin{pmatrix} 39 & 21 & 3 & 8 & 23 & 35 & 7 \\ 32 & 18 & 3 & 7 & 19 & 28 & 7 \\ 34 & 19 & 4 & 8 & 20 & 30 & 7 \\ -35 & -20 & -4 & -8 & -21 & -31 & -8 \\ -18 & -10 & -2 & -4 & -11 & -16 & -4 \\ -3 & -2 & 0 & 0 & -2 & -3 & -1 \\ -6 & -4 & 0 & -1 & -4 & -5 & -2 \end{pmatrix}$$