

HG Mikky  
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Final Values

1st pass thru

LSN	$A_{11} + 5$	$A_{11} = \frac{1}{8}$	1.15	0.57	0.0004
MISN	$A_{11} + 0$	$A_{11} = \frac{1}{10}$	1.0	0.0000	0.0000

SSN (TEMP)

LSN	$A_{11} + 4$	$A_{11} = \frac{1}{5}$	0.2	0.0	0.0000
MISN	$A_{11} + 1$	$A_{11} = \frac{1}{2}$	0.5	0.10	0.0000

ASN (TEMP)

LSN	$A_{11} + 10$	$A_{11} = \frac{1}{10}$	2.09	0.0000	0.0000
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Exact Value of one Term:

$$B_{44} = \begin{vmatrix} 1 & \frac{1}{5} & \frac{1}{9} \\ \frac{1}{2} & \frac{1}{6} & \frac{1}{10} \\ \frac{1}{3} & \frac{1}{7} & \frac{1}{11} \end{vmatrix}$$

$$\frac{1}{11} \left( 1 \cdot \frac{1}{6} - \frac{1}{2} \cdot \frac{1}{5} \right) - \frac{1}{10} \left( 1 \cdot \frac{1}{7} - \frac{1}{5} \cdot \frac{1}{3} \right) + \frac{1}{9} \left( \frac{1}{2} \cdot \frac{1}{7} - \frac{1}{3} \cdot \frac{1}{10} \right)$$

$$\frac{1}{11} \left( \frac{1}{6} - \frac{1}{10} \right) - \frac{1}{10} \left( \frac{1}{7} - \frac{1}{15} \right) + \frac{1}{9} \left( \frac{1}{14} - \frac{1}{18} \right)$$

$$\frac{1}{11} \left( \frac{4}{60} \right) - \frac{1}{10} \left( \frac{8}{105} \right) + \frac{1}{9} \left( \frac{4}{252} \right)$$

$$\frac{1}{11} \left( \frac{1}{15} \right) - \frac{1}{10} \left( \frac{8}{105} \right) + \frac{1}{9} \left( \frac{1}{63} \right)$$

$$\frac{1}{165} - \frac{4}{525} + \frac{1}{567}$$

$$\frac{1}{11 \cdot 5 \cdot 3} - \frac{4}{5 \cdot 7 \cdot 5 \cdot 3} + \frac{1}{3 \cdot 3 \cdot 7 \cdot 3 \cdot 3}$$

$$\frac{1}{3} \left[ \frac{1}{55} - \frac{4}{175} + \frac{1}{189} \right]$$

$$\frac{1}{3} \left[ \frac{(175)(189) - 4(55)(189) + (55)(175)}{(55)(175)(189)} \right]$$

$$\frac{1}{3} \left[ \frac{33075 - 41580 + 9625}{1819125} \right]$$

$$\frac{1}{3} \left[ \frac{1120}{1819125} \right] = \frac{1120}{5457375} = \underline{.20522687 \cdot 10^{-3}}$$

$$= \frac{224 \cdot 2 \cdot 8 \cdot 7}{1,091,475} = \frac{32}{155,925}$$

Matrix

Transposed

$$\begin{pmatrix} 1 & \frac{1}{2} & \frac{1}{3} & \frac{1}{4} \\ \frac{1}{5} & \frac{1}{6} & \frac{1}{7} & \frac{1}{8} \\ \frac{1}{9} & \frac{1}{10} & \frac{1}{11} & \frac{1}{12} \\ \frac{1}{13} & \frac{1}{14} & \frac{1}{15} & \frac{1}{16} \end{pmatrix}$$

$$\begin{pmatrix} 1 & \frac{1}{5} & \frac{1}{9} & \frac{1}{13} \\ \frac{1}{2} & \frac{1}{6} & \frac{1}{10} & \frac{1}{14} \\ \frac{1}{3} & \frac{1}{7} & \frac{1}{11} & \frac{1}{15} \\ \frac{1}{4} & \frac{1}{8} & \frac{1}{12} & \frac{1}{16} \end{pmatrix}$$

$$4 \rightarrow I \quad 2 \rightarrow R \rightarrow R' \quad 1 \rightarrow R'$$

$$4 \rightarrow J \quad 2 \rightarrow R \rightarrow C \quad 1 \rightarrow C'$$

$$3 \rightarrow A \rightarrow C$$

$$3 \rightarrow A \rightarrow C$$

$$4(3-1) + 3-1 + A_{11} = A_{11} + 10$$

$$4(4-1) + 4-1 + B_{11} = B_{11} + 15$$

$$r \quad 3-4$$

$$\begin{matrix} 3-4 \\ 1 \end{matrix} \quad 3-3 \quad r-$$

$$e \quad 4-4$$

$$3-3$$

$$4(2-1) + 2-1 + A_{11} = A_{11} + 5$$

$$4(2-1) + 1-1 \quad A_{11} + 4$$

$$0 + 1 \quad A_{11} + 1$$

$$0 + 1-1 \quad A_{11}$$

$$B_{32} = - \begin{vmatrix} 1 & \frac{1}{5} & \frac{1}{13} \\ \frac{1}{3} & \frac{1}{7} & \frac{1}{15} \\ \frac{1}{4} & \frac{1}{8} & \frac{1}{16} \end{vmatrix}$$

$$B_{23} = - \begin{vmatrix} 1 & \frac{1}{9} & \frac{1}{13} \\ \frac{1}{2} & \frac{1}{10} & \frac{1}{14} \\ \frac{1}{4} & \frac{1}{12} & \frac{1}{16} \end{vmatrix}$$

$$\begin{aligned} B_{32} &= - \left[ \frac{1}{16} \left( 1 \cdot \frac{1}{7} - \frac{1}{3} \cdot \frac{1}{5} \right) - \frac{1}{15} \left( 1 \cdot \frac{1}{8} - \frac{1}{4} \cdot \frac{1}{5} \right) + \frac{1}{13} \left( \frac{1}{3} \cdot \frac{1}{8} - \frac{1}{4} \cdot \frac{1}{7} \right) \right] \\ &= \frac{1}{16} \left( \frac{1}{7} - \frac{1}{15} \right) - \frac{1}{15} \left( \frac{1}{8} - \frac{1}{20} \right) + \frac{1}{13} \left( \frac{1}{24} - \frac{1}{28} \right) \\ &= \frac{1}{2} \left( \frac{1}{105} \right) - \frac{1}{20} \left( \frac{1}{10} \right) + \frac{1}{52} \left( \frac{1}{42} \right) \\ &= \frac{1}{210} - \frac{1}{200} + \frac{1}{2184} \\ &= - \left[ \frac{-1}{4200} + \frac{1}{2184} \right] \\ &= \frac{-2016}{9172800} \end{aligned}$$

$$B_{32} = -219780219 \times 10^{-3}$$

$$\begin{aligned} B_{23} &= - \left[ \frac{1}{16} \left( 1 \cdot \frac{1}{10} - \frac{1}{2} \cdot \frac{1}{9} \right) - \frac{1}{14} \left( 1 \cdot \frac{1}{12} - \frac{1}{4} \cdot \frac{1}{9} \right) + \frac{1}{13} \left( \frac{1}{2} \cdot \frac{1}{12} - \frac{1}{4} \cdot \frac{1}{10} \right) \right] \\ &= \frac{1}{32} \left( \frac{1}{5} - \frac{1}{9} \right) - \frac{1}{168} \left( 1 - \frac{1}{3} \right) + \frac{1}{104} \left( \frac{1}{3} - \frac{1}{5} \right) \\ &= \frac{1}{32} \left( \frac{4}{45} \right) - \frac{1}{168} \left( \frac{2}{3} \right) + \frac{1}{104} \left( \frac{2}{15} \right) \\ &= \frac{1}{8 \cdot 45} - \frac{1}{84 \cdot 3} + \frac{1}{52 \cdot 15} \\ &= \frac{1}{360} - \frac{1}{252} + \frac{1}{780} = - \frac{108}{90720} + \frac{1}{780} = \frac{-27}{22680} + \frac{1}{780} \\ &= - \left[ \frac{-1}{840} + \frac{1}{780} \right] = - \left[ \frac{60}{655200} \right] \end{aligned}$$

$$B_{23} = -915750915 \times 10^{-4}$$

$$B_{43} = \begin{vmatrix} 1 & \frac{1}{5} & \frac{1}{9} \\ \frac{1}{2} & \frac{1}{6} & \frac{1}{16} \\ \frac{1}{4} & \frac{1}{8} & \frac{1}{12} \end{vmatrix}$$

$$B_{42} = \begin{vmatrix} 1 & \frac{1}{5} & \frac{1}{9} \\ \frac{1}{3} & \frac{1}{7} & \frac{1}{11} \\ \frac{1}{4} & \frac{1}{8} & \frac{1}{12} \end{vmatrix}$$

$$= \frac{1}{12} \left( 1 \cdot \frac{1}{6} - \frac{1}{2} \cdot \frac{1}{5} \right) - \frac{1}{10} \left( 1 \cdot \frac{1}{8} - \frac{1}{4} \cdot \frac{1}{5} \right) + \frac{1}{9} \left( \frac{1}{2} \cdot \frac{1}{8} - \frac{1}{4} \cdot \frac{1}{6} \right)$$

$$= \frac{1}{24} \left( \frac{1}{3} - \frac{1}{5} \right) - \frac{1}{40} \left( \frac{1}{2} - \frac{1}{5} \right) + \frac{1}{72} \left( \frac{1}{2} - \frac{1}{3} \right)$$

$$= \frac{1}{24} \left( \frac{2}{15} \right) - \frac{1}{40} \left( \frac{3}{10} \right) + \frac{1}{72} \left( \frac{1}{6} \right) = .0055555555 - .007500 + .0023148148$$

$$= \frac{1}{180} - \frac{3}{400} + \frac{1}{432} = \frac{1}{20} \left[ \frac{1}{9} - \frac{3}{20} \right] + \frac{1}{432}$$

$$= \frac{1}{20} \cdot \left( \frac{-7}{180} \right) + \frac{1}{20} \cdot \left( \frac{5}{108} \right) = \frac{1}{20} \left[ \frac{756 - 900}{19,440} \right] = \frac{1}{20} \left[ \frac{-144}{19,440} \right] = \frac{4 \times 4}{5(2160 \times 4)}$$

$$= \frac{1}{5(540)} = \frac{1}{2700}$$

$$B_{43} = +,37037037 \times 10^{-3}$$

$$B_{42} = \frac{1}{12} \left( 1 \cdot \frac{1}{7} - \frac{1}{3} \cdot \frac{1}{5} \right) - \frac{1}{11} \left( 1 \cdot \frac{1}{8} - \frac{1}{4} \cdot \frac{1}{5} \right) + \frac{1}{9} \left( \frac{1}{3} \cdot \frac{1}{8} - \frac{1}{4} \cdot \frac{1}{7} \right)$$

$$= \frac{1}{12} \left( \frac{1}{7} - \frac{1}{15} \right) - \frac{1}{44} \left( \frac{1}{2} - \frac{1}{5} \right) + \frac{1}{36} \left( \frac{1}{6} - \frac{1}{7} \right)$$

$$= \frac{1}{12} \left( \frac{8}{105} \right) - \frac{1}{44} \left( \frac{3}{10} \right) + \frac{1}{36} \left( \frac{1}{42} \right)$$

$$= \frac{2}{315} - \frac{3}{440} + \frac{1}{1512} = \frac{880 - 945}{138,600} + \frac{1}{1512}$$

$$= \frac{-13}{27,720} + \frac{1}{1512} = \frac{-19,656 + 27,720}{4,912,640} = \frac{8,064}{41,912,640}$$

$$B_{42} = 0,192400192 \times 10^{-3}$$

$$= \frac{1}{5197.5}$$

$$B_{41} = \begin{vmatrix} \frac{1}{2} & \frac{1}{6} & \frac{1}{10} \\ \frac{1}{3} & \frac{1}{7} & \frac{1}{11} \\ \frac{1}{4} & \frac{1}{8} & \frac{1}{12} \end{vmatrix}$$

$$= \frac{1}{12} \left( \frac{1}{2} \cdot \frac{1}{7} - \frac{1}{3} \cdot \frac{1}{6} \right) - \frac{1}{11} \left( \frac{1}{2} \cdot \frac{1}{8} - \frac{1}{4} \cdot \frac{1}{6} \right) + \frac{1}{10} \left( \frac{1}{3} \cdot \frac{1}{8} - \frac{1}{4} \cdot \frac{1}{7} \right)$$

$$= \frac{1}{24} \left( \frac{1}{7} - \frac{1}{9} \right) - \frac{1}{88} \left( \frac{1}{2} - \frac{1}{3} \right) + \frac{1}{40} \left( \frac{1}{6} - \frac{1}{7} \right)$$

$$= \frac{1}{12} \left( \frac{1}{63} \right) - \frac{1}{88} \left( \frac{1}{6} \right) + \frac{1}{40} \left( \frac{1}{42} \right) = .0013227513 - .0018939394 + .0005952381$$

$$= \frac{1}{12} \left[ \frac{1}{63} - \frac{1}{44} \right] + \frac{1}{40} \left( \frac{1}{42} \right) = \frac{1}{12} \left[ \frac{-19}{2772} \right] + \frac{1}{40} \left( \frac{1}{42} \right) = .00024506$$

$$= \frac{1}{6 \cdot 4 \cdot 7} \left[ \frac{-19}{198} + \frac{1}{10} \right]$$

$$6 \cdot 4 = 24$$

$$6 \cdot 4 \cdot 7 = 198$$

$$= \frac{1}{168} \left[ \frac{-190 + 198}{1980} \right] = \frac{1}{21} \left( \frac{1}{1980} \right) = \frac{1}{41580}$$

$$B_{41} = -.240500240 \times 10^{-4}$$

$$|a| = \frac{1}{16} B_{44} + \frac{1}{15} B_{43} + \frac{1}{14} B_{42} + \frac{1}{13} B_{41}$$

$$= \left( \frac{2}{155,925} \right) + \left( \frac{-1}{40,500} \right) + \left( \frac{1}{72,765} \right) + \left( \frac{-1}{540,540} \right)$$

$$= .000012826679494$$

$$- .00002469135802$$

$$.00001374287088$$

$$- .00000185000185$$

$$.00000002819050$$

with 8 digit no.

$$1st = (.625)(.20522687) = .12826679$$

$$- (.66666667)(.37037037) = -.24691358$$

$$+ (.71428571)(.19240019) = .13742871$$

$$= (.76923077)(.24050024) = \underline{-.01850002}$$

28190