

$$a_{11} + 2a_{12} + a_{13} = 4$$

$$a_{21} + a_{22} + a_{23} = 4$$

$$a_{23} = 6, a_{22} = -2, a_{21} = 0$$

left[matrix{1#2#1#2##2#1#1#-1##3#1#1#-4} right] ~~~~~ left[matrix{1#2#1#2##2#1#1#4##3#1#1#4} right]newline
left[matrix{3#1#1#-4##2#1#1#-1##1#2#1#2} right]~~~~~left[matrix{3#1#1#-4##0#-1/3#-1/3#5/3##1#2#1#2} right]~~~~~left[matrix{3#1#1#-4##0#-1/3#-1/3#5/3##0#5/3#2/3#10/3} right] ~~~~~
a_13=-35/3~~a_12=20/3~~a_11=1/3newline
left[matrix{3#1#1#4##2#1#1#4##1#2#1#2} right] ~~~~~ left[matrix{3#1#1#4##0#1/3#1/3#4/3##1#2#1#2} right]~~~~~left[matrix{3#1#1#4##0#1/3#1/3#4/3##0#5/3#2/3#2/3} right] ~~~~~
a_23=6~~~a_22=-2~~a_21=0 newline
left[matrix{1/3#20/3#-35/3##0#-2#6##0#0#1} right]newline
inverse A=left[matrix{3#10#-25##0#-1/2#3##0#0#1} right]newline