SIGNAL-FLOW GRAPH COMPONENTS:

A. SYSTEM;

B. SIGNAL;

C. INTERCONNECTION OF SYSTEMS AND SIGNALS

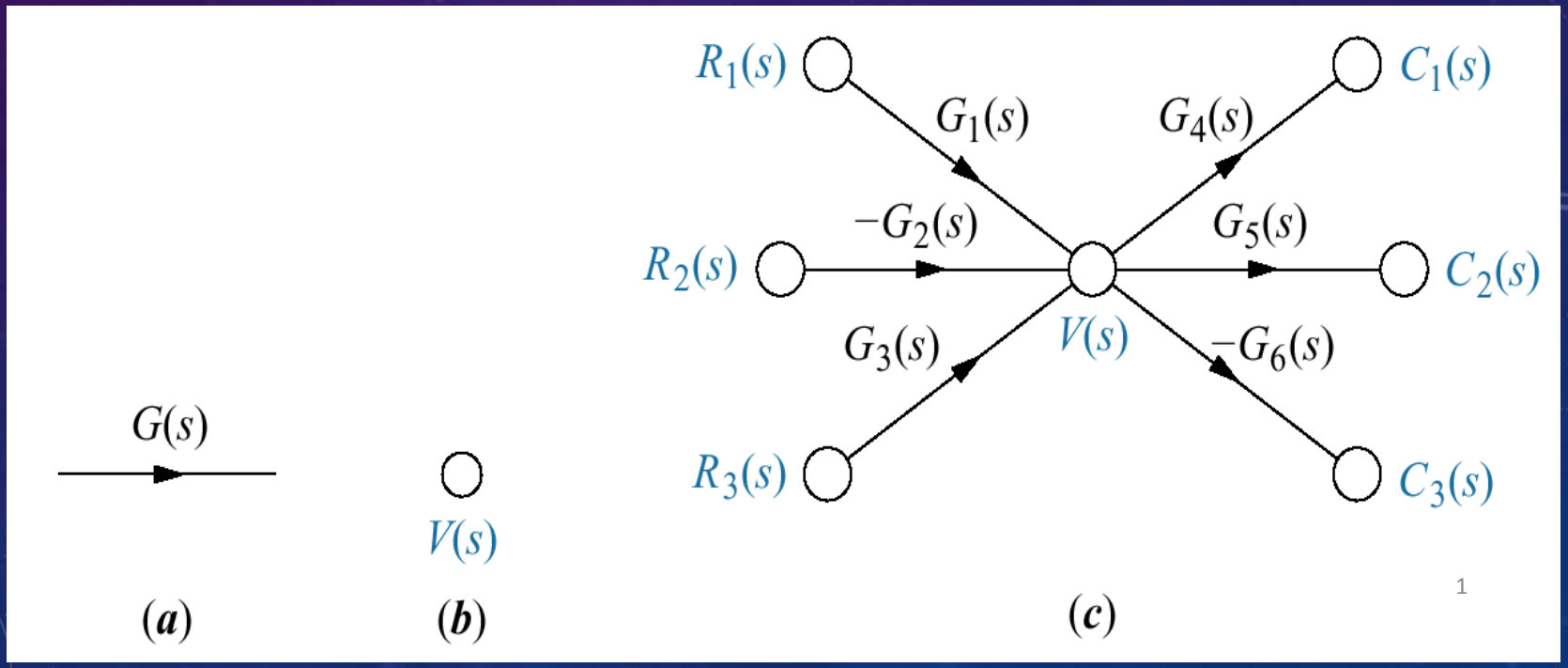

FIGURE 2.18

BUILDING SIGNAL-FLOW GRAPHS:

A. CASCADED SYSTEM NODES (FROM FIGURE 5.3(A));

B. CASCADED SYSTEM SIGNAL-FLOW GRAPH;

C. PARALLEL SYSTEM NODES (FROM FIGURE 5.5(A));

D. PARALLEL SYSTEM SIGNAL-FLOW GRAPH;

E. FEEDBACK SYSTEM NODES (FROM FIGURE 5.6(B));

F. FEEDBACK SYSTEM SIGNAL-FLOW GRAPH

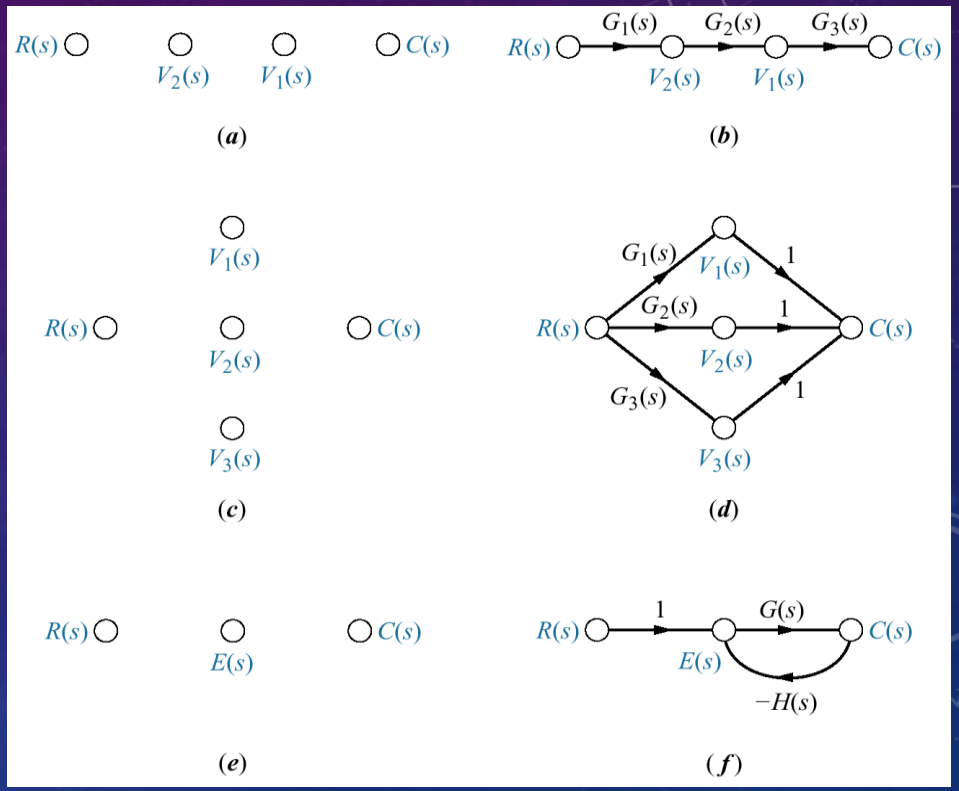

FIGURE 2.19
SIGNAL-FLOW GRAPH DEVELOPMENT:
A. SIGNAL NODES;
B. SIGNAL-FLOW GRAPH;
C. SIMPLIFIED SIGNAL-FLOW GRAPH

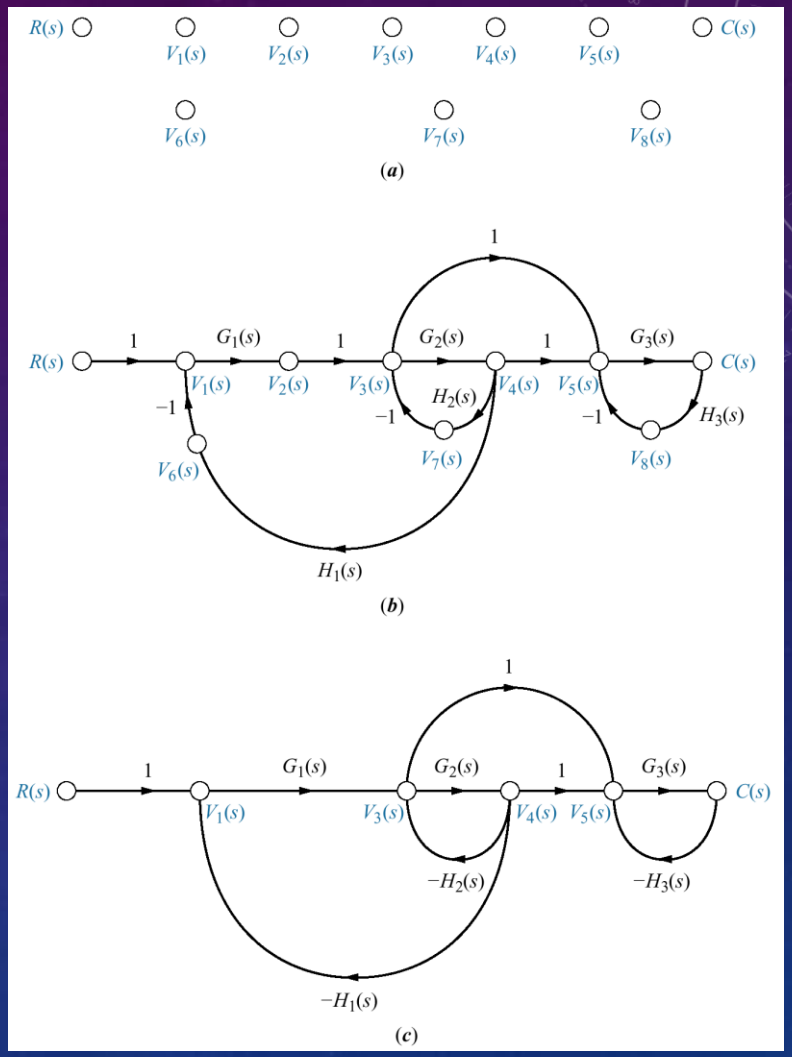

FIGURE 2.20
SIGNAL-FLOW GRAPH FOR DEMONSTRATING MASON'S RULE

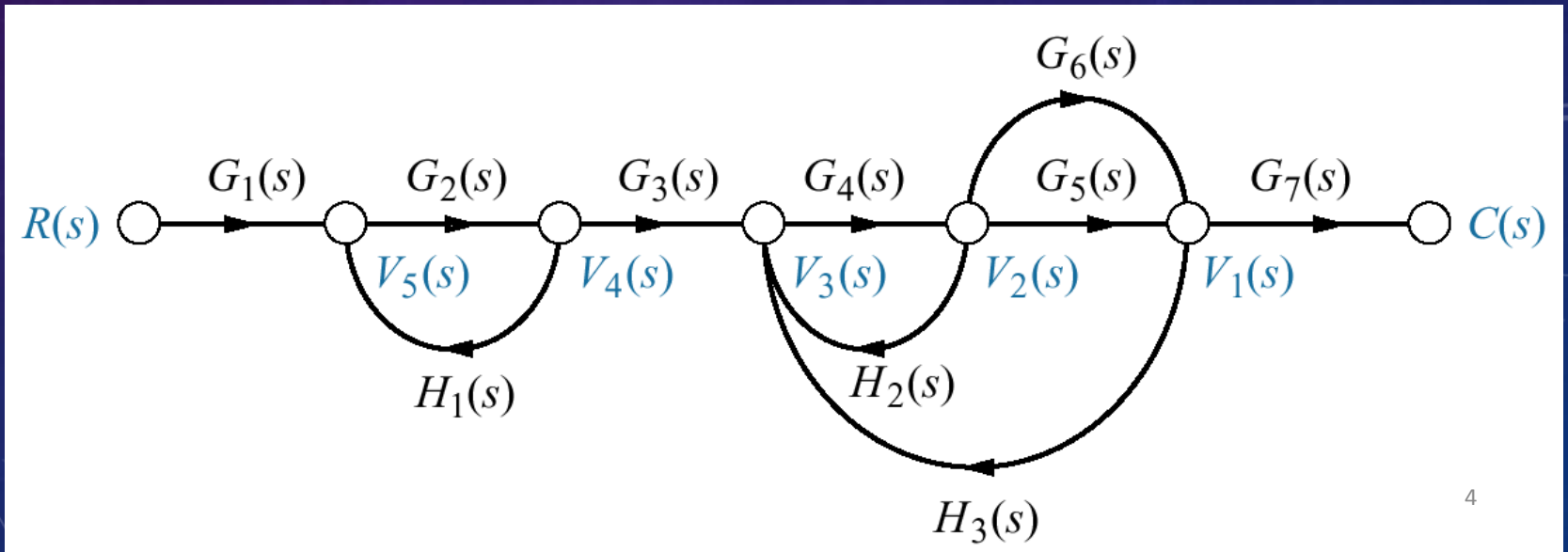

FIGURE 2.21
SIGNAL-FLOW GRAPH FOR EXAMPLE 5.7

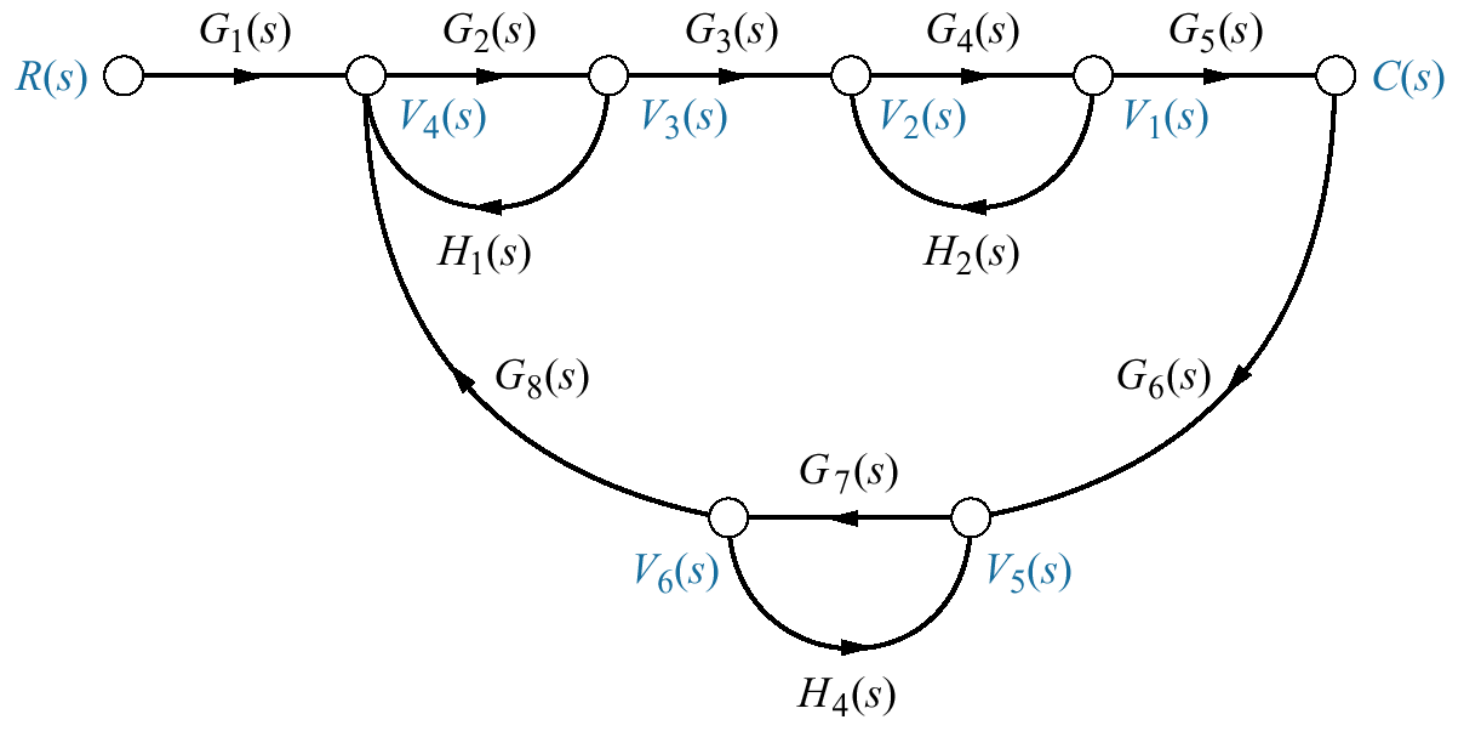

FIGURE 2.22

STAGES OF DEVELOPMENT OF A SIGNAL-FLOW GRAPH FOR THE SYSTEM OF EQS. 5.36:

A. PLACE NODES;

B. INTERCONNECT STATE VARIABLES AND DERIVATIVES;

C. FORM DX_1/DT ;

D. FORM DX_2/DT

(FIGURE CONTINUES)

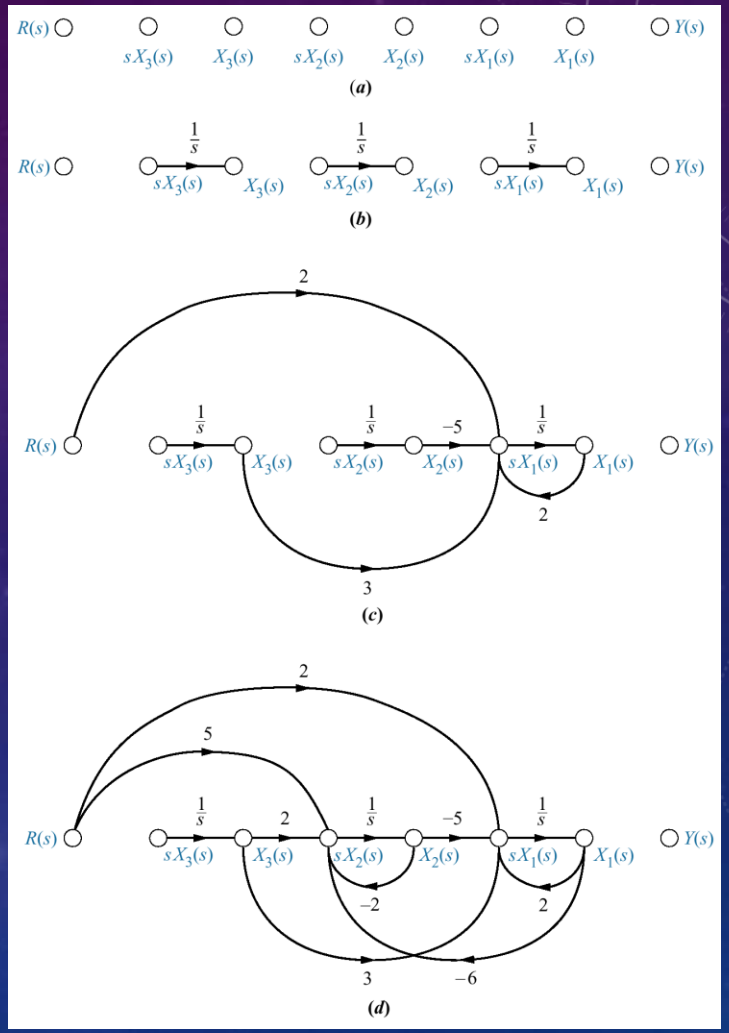

FIGURE 2.23
REPRESENTATION OF FIGURE 3.10 SYSTEM AS CASCADED FIRST-ORDER SYSTEMS

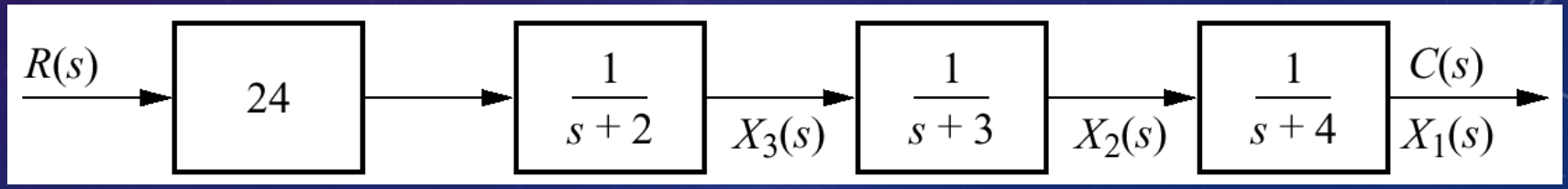

FIGURE 5.24
A. FIRST-ORDER SUBSYSTEM;
B. SIGNAL-FLOW GRAPH FOR FIGURE 5.23 SYSTEM

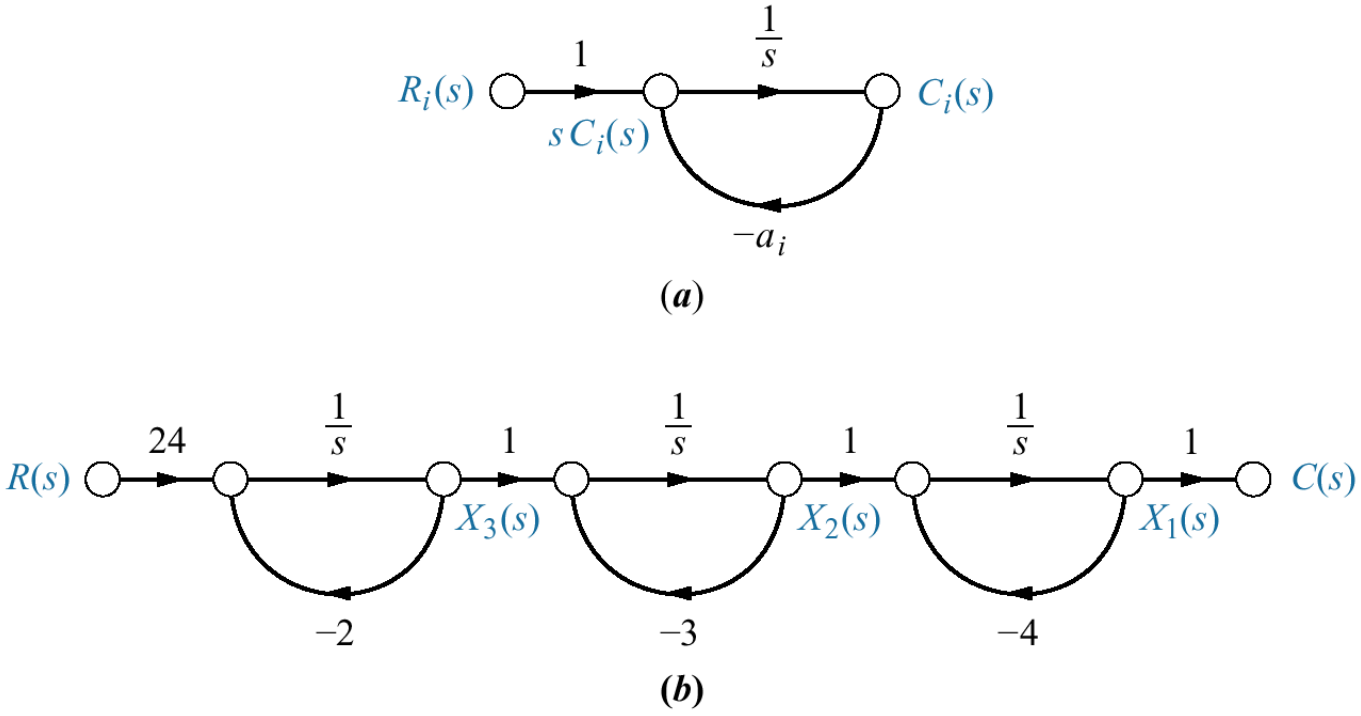

FIGURE 5.25
SIGNAL-FLOW REPRESENTATION OF EQ. (5.45)

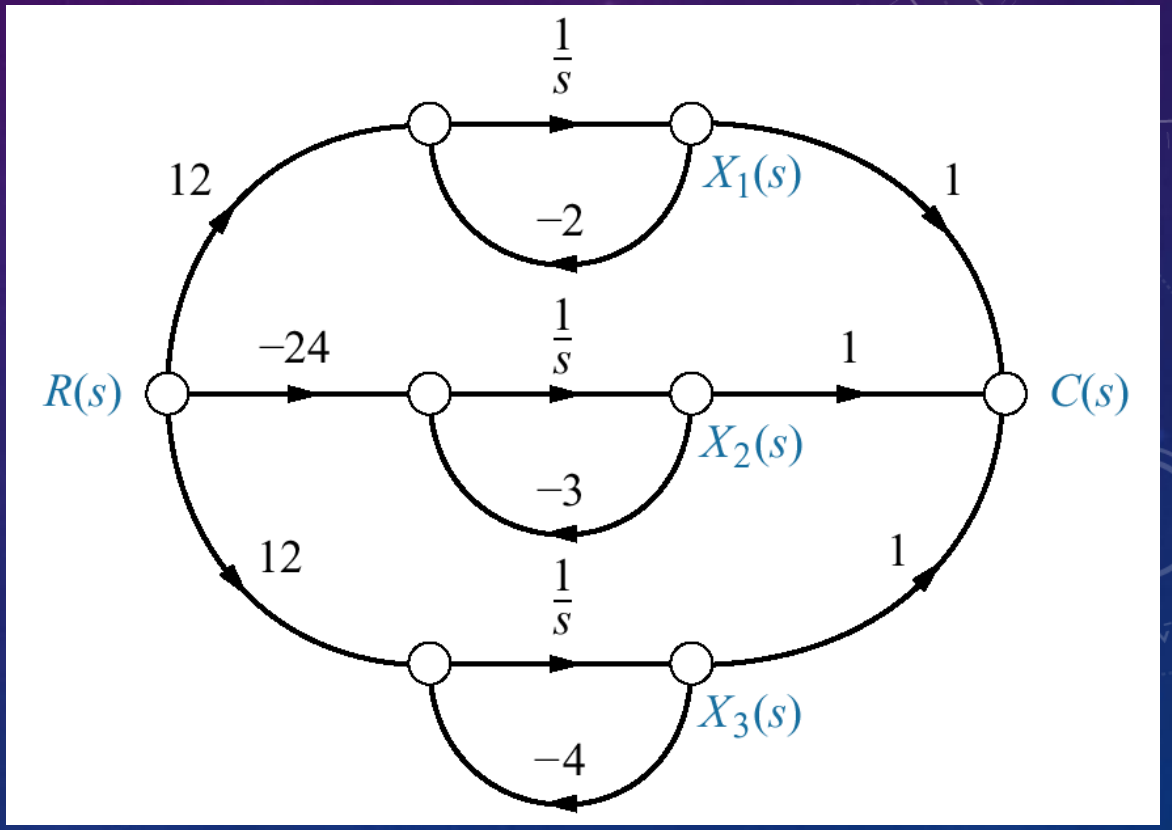

FIGURE 5.26
SIGNAL-FLOW REPRESENTATION OF EQ. (5.52)

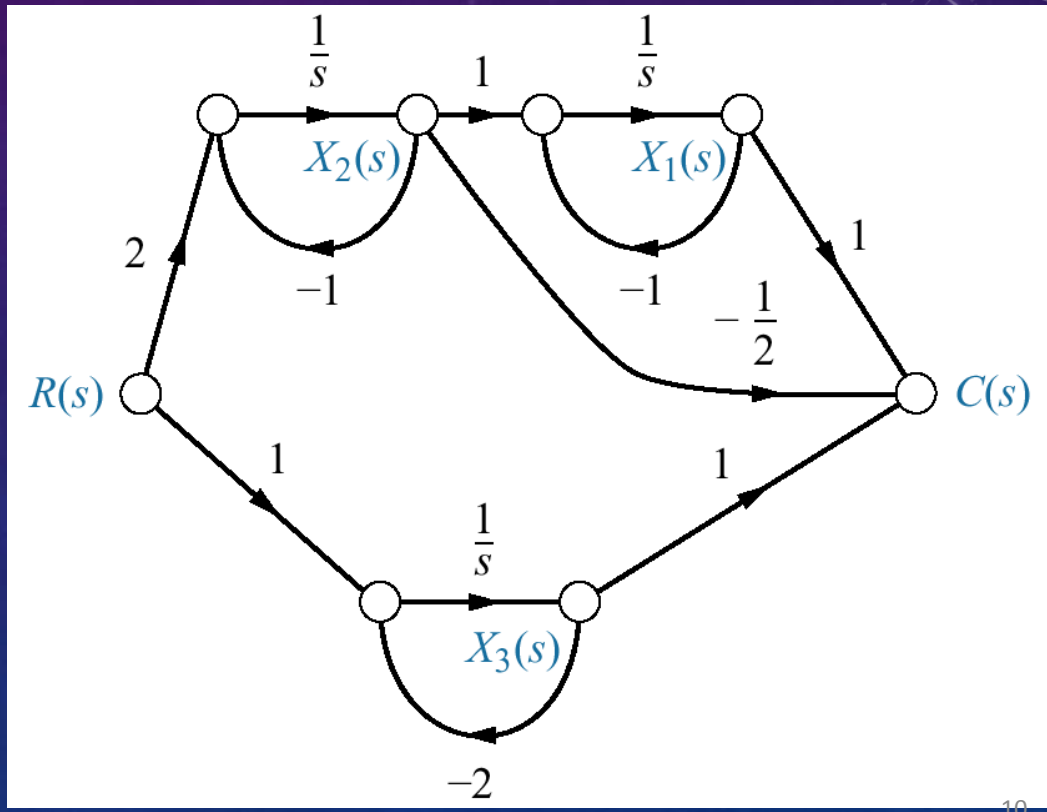

FIGURE 5.27

SIGNAL-FLOW GRAPHS FOR OBTAINING FORMS FOR $G(S) = C(S)/R(S) = (S^2 + 7S + 2)/(S^3 + 9S^2 + 26S + 24)$:

A. PHASE-VARIABLE FORM;

B. CONTROLLER CANONICAL FORM

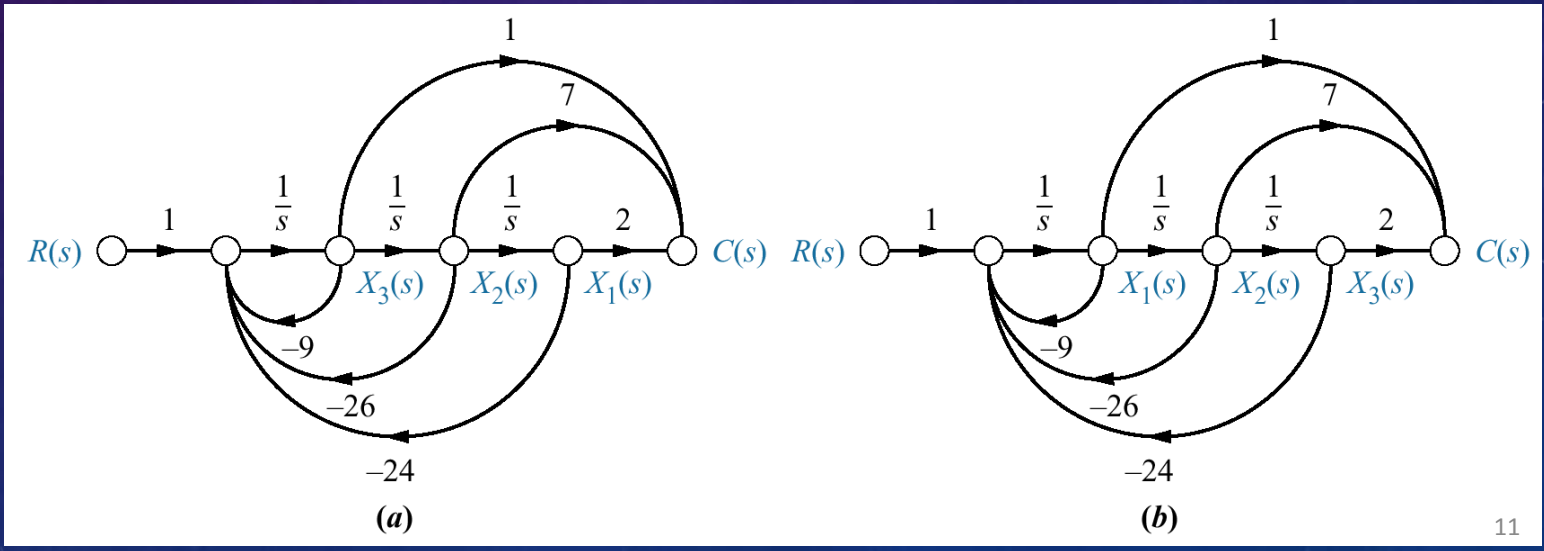

FIGURE 5.28

SIGNAL-FLOW GRAPH FOR OBSERVER CANONICAL FORM VARIABLES:

A. PLANNING;

B. IMPLEMENTATION